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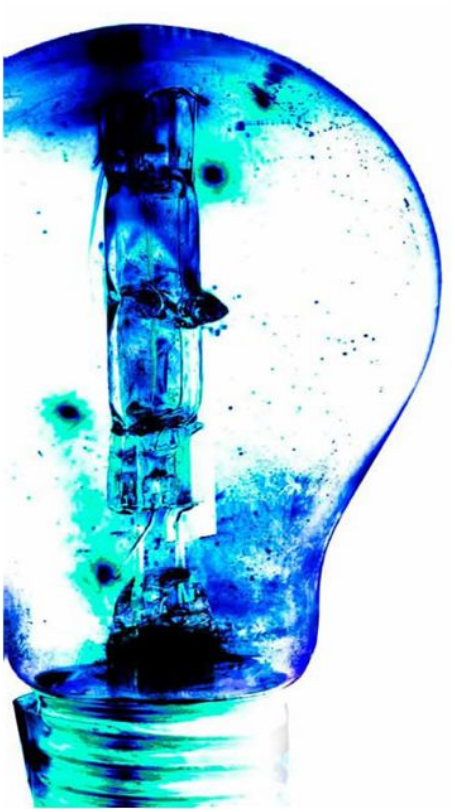
The QUT Innovation space: A trans-disciplinary learning environment for entrepreneurship education



Final Report 2014

Queensland University of Technology

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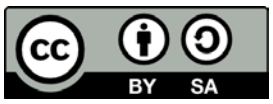

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A special thank you to Jessie who designed and implemented most of the QIS activities, and transitioned them into another life.

List of acronyms used

ALTC	Australian Learning and Teaching Council Ltd
BEE	Built Environment and Engineering
CA	Confidentiality agreement
CEA	Creative Enterprise Australia (QUT)
DEEWR	Department of Education, Employment and Workplace Relations.
E4H	Engineering for Humanity
EC	European Commission
EE	Entrepreneurship education
EU	European Union
FaST	Faculty of Science and Technology
FoH	Faculty of Health
ICT	Information and communications technology
IP	Intellectual property
IT	Information technology
L&T	Learning and teaching
LDI	Leadership Development and Innovation
MIC	Microsoft Innovation Centre
MOU	Memorandum of Understanding
MVP	Minimum viable product
NA	National Academies (USA)
NIH	National Institutes of Health
QIS	QUT Innovation Space
QUT	Queensland University of Technology
R&D	Research and development
RCL	River City Labs
SEF	Science and Engineering Faculty
SI&E	Student innovator and entrepreneur
TAFE	Technical and Further Education
UAG	User Advisory Group
URL	Universal resource locator
US	United States
USA	United States of America

Executive summary

In the current climate of global economic volatility, there are increasing calls for training in enterprising skills and entrepreneurship to underpin the systemic innovation required for even medium-term business sustainability. The skills long-recognised as the essential for entrepreneurship now appear on the list of employability skills demanded by industry.

The QUT Innovation Space (QIS) was an experiment aimed at delivering entrepreneurship education (EE), as an extra-curricular platform across the university, to the undergraduate students of an Australian higher education institute. It was an ambitious project that built on overseas models of EE studied during an Australian Learning and Teaching Council (ALTC) Teaching Fellowship (Collet, 2011) and implemented those approaches across an institute. Such EE approaches have not been attempted in an Australian university. The project tested resonance not only with the student population, from the perspective of what worked and what didn't work, but also with every level of university operations. Such information is needed to inform the development of EE in the Australian university landscape.

The QIS comprised a physical co-working space, virtual sites (web, Twitter and Facebook) and a network of entrepreneurial mentors, colleagues, and students. All facets of the QIS enabled connection between like-minded individuals that underpins the momentum needed for a project of this nature. The QIS became an innovation community within QUT.

This report serves two purposes. First, as an account of the QIS project and its evolution, the report serves to identify the student demand for skills and training as well as barriers and facilitators of the activities that promote EE in an Australian university context. Second, the report serves as a how-to manual, in the tradition of many tomes on EE, outlining the QIS activities that worked as well as those that failed. The activities represent one measure of QIS outcomes and are described herein to facilitate implementation in other institutes.

The QIS initially aimed to adopt an incubation model for training in EE. The 'learning by doing' model for new venture creation is a highly successful and high profile training approach commonly found in overseas contexts. However, the greatest demand of the QUT student population was not for incubation and progression of a developed entrepreneurial intent, but rather for training that instilled enterprising skills in the individual. These two scenarios require different training approaches (Fayolle and Gailly, 2008). The activities of the QIS evolved to meet that student demand. In addressing enterprising skills, the QIS developed the antecedents of entrepreneurialism (i.e., entrepreneurial attitudes, motivation and behaviours) including high-level skills around risk-taking, effective communication, opportunity recognition and action-orientation.

In focusing on the would-be entrepreneur and not on the (initial) idea *per se*, the QIS also fostered entrepreneurial outcomes that would never have gained entry to the rigid stage-gated incubation model proposed for the original QIS framework.

Important lessons learned from the project for development of an innovation community include the need to:

1. Evaluate the context of the type of EE program to be delivered and the student demand for the skills training (as noted above).
2. Create a community that builds on three dimensions: a physical space, a virtual environment and a network of mentors and partners.
3. Supplement the community with external partnerships that aid in delivery of skills training materials.
4. Ensure discovery of the community through the use of external IT services to deliver advertising and networking outlets.
5. Manage unrealistic student expectations of billion dollar products.
6. Continuously renew and rebuild simple activities to maintain student engagement.
7. Accommodate the non-university end-user group within the community.
8. Recognise and address the skills bottlenecks that serve as barriers to concept progression; in this case, externally provided IT and programming skills.
9. Use available on-line and published resources rather than engage in constructing project-specific resources that quickly become obsolete.
10. Avoid perceptions of faculty ownership and operate in an increasingly competitive environment.
11. Recognise that the continuum between creativity/innovation and entrepreneurship is complex, non-linear and requires different training regimes during the different phases of the pipeline. One small entity, such as the QIS, cannot address them all.

The QIS successfully designed, implemented and delivered activities that included events, workshops, seminars and services to QUT students in the extra-curricular space. That the QIS project can be considered *successful* derives directly from the outcomes. First, the QIS project changed the lives of emerging QUT student entrepreneurs. Also, the QIS activities developed enterprising skills in students who did not necessarily have a business proposition, at the time. Second, successful outcomes of the QIS project are evidenced as the embedding of most, perhaps all, of the QIS activities in a new Chancellery-sponsored initiative: the Leadership Development and Innovation Program hosted by QUT Student Support Services.

During the course of the QIS project, the Brisbane-based innovation ecosystem underwent substantial change. From a dearth of opportunities for the entrepreneurially inclined, there is now a plethora of entities that cater for a diversity of innovation-related activities. While the QIS evolved with the landscape, the demand endpoint of the QIS activities still highlights a gap in the local and national innovation ecosystems. The freedom to experiment and to fail is not catered for by the many new entities seeking to build viable businesses on the back of the innovation push. The onus of teaching the enterprising skills, which are the employability skills now demanded by industry, remains the domain of the higher education sector.

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Chapter 1 – Beginnings

Why the QUT Innovation Space?

The QUT Innovation Space (QIS) was an experiment aimed at instilling entrepreneurial behaviours and skills in undergraduate students. The notion of an extracurricular platform that could address the creativity, innovation and new venture creation of undergraduate students is not a new idea by any means, however, there have been few attempts to build such programs into the Australian university scene. The QIS represents an attempt to embed such a learning and teaching (L&T) platform in an Australian university.

The QIS project builds on an Australian Learning and Teaching Council (ALTC) Teaching Fellowship that addressed skills requirements of the Australian innovation and commercialisation industry and approaches to education that attempted to instil entrepreneurial skills in undergraduate students (Collet, 2011). With regards to the latter, the Fellowship examined international exemplars of entrepreneurship education (EE) platforms that captured undergraduate entrepreneurial intent. The QIS project was an attempt to apply the lessons of the Fellowship in the extracurricular space at the Queensland University of Technology (QUT).

This chapter introduces the reasoning behind the idea, the genesis of the project and describes the initial steps of the project. The following chapters describe the learning and teaching approaches, outline the logistics and outcomes involved in building programs of this nature and describe the evolving journey of the project in an innovation ecosystem undergoing substantial re-invention.

In keeping with the many tomes that encourage and elaborate on EE, this report also serves as a 'how-to' manual as much as it provides an account of the project.

The QUT Innovation Space was about harnessing creativity, innovation and entrepreneurship. The terms are often used interchangeably when, in reality, they represent a progression that may see a commercial product eventuate from an idea (Fig. 1.1). To understand the aims and scope of the project, as well as the discussion, the following definitions are invoked:

- Creativity – inventiveness and imagination.
- Innovation – make changes; bring in new ideas or methods.
- Entrepreneurship – to implement a new enterprise for profit/loss.

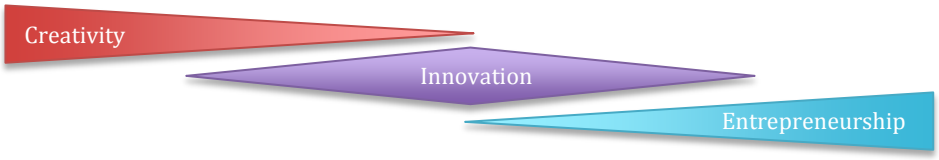


Figure 1.1 – The path from an idea to commercial product is a continuum.

The Global Landscape in 2010

The underlying rationale for the QIS project is simple: while innovation creates intellectual property, it is entrepreneurship that creates new ventures that ultimately impact on the economy. Australians have a long history of innovation but a poor record of transition from the bench to the marketplace. Such indifference to the potential of indigenous intellectual property can be attributed to the preference of Australian industry to import innovation and technology rather than invest in research and development (R&D). Even through the current global financial crisis, Australia has shown resilience to the ill fortunes that have plagued much of the western world. It is widely acknowledged that the economic resilience stems from revenues wrought from the mining and agricultural sectors that served to buffer the economy. There is, however, recognition that these two sectors are not sufficient to support the Australian economy over the long term.

Indeed as the mining sector begins to slow down in 2013, we are witnessing increased calls for investment in education programs that instil in graduates skills that will underpin the growth of knowledge-based industries (West, 2012; Office of the Chief Scientist, 2013; Le Grew, 2013).

From a policy perspective, the Australian Federal and State Governments have long recognised the need to invest in R&D and build a foundation for knowledge-intensive industries to flourish (Government of Australia, 2001; Queensland Innovation Council, 2001). The Australian policy documents echoed similar concerns of many western countries that recognised the need to revitalise stagnant economies to meet the threat of the rising mega-economies of China and India (for example: European Commission [EC], 2003; National Academies [NA], 2007). With the pragmatic realisation that increased funding of innovation failed to realise commercial outputs, the early emphasis on increased funding of research (EC, 2003) has been replaced by calls for research outcomes to be translated into commercial opportunities and for entrepreneurship education to be a central platform at every level of teaching from primary through to tertiary education institutes (EC, 2006; NA, 2010).

To drive the commercialisation of research outcomes, the European Institute of Innovation and Technology extended the philosophy of the research-focused EU Framework Programme grants scheme to include EE as a central pillar for the funding of knowledge and innovation communities (Schurmanns, 2009). In the area of EE, the USA has witnessed an explosion of formal programs in the tertiary sector (Ewing Marion Kauffman Foundation, 2008), an increase in networking activities (eg, the Babson and the Roundtable on Entrepreneurship Education Conferences, Stanford) and the emergence of funding bodies focusing on entrepreneurship research including education (eg, the Ewing Marion Kauffman Foundation). The rest of the world, bar Australia, rapidly followed suit to focus on progressing research into the commercial marketplace.

Concomitant with calls for increased entrepreneurial activity (including education in entrepreneurship), concerns were raised about the suitability of higher education graduates for employment and the applicability of their skills to the workplace (Anderson *et al.*, 2003; Blanchflower and Arnold, 1998; Harvey, 2001). Harvey (2001) argues that, as Western

societies become increasingly educated and global economies increasingly complex and competitive, higher education providers are not imparting the necessary basic business and soft skills for graduates' employment essential to productivity improvement. In the current global economic instability, concerns regarding the widening skills gap have become more acute as a consequence of the rapid evolution of industry and the need for an expanded skill set to underpin the systemic innovation required for even medium-term business sustainability (Casner-Lotto and Barrington, 2006; Moreland, 2007; Department of Education, Employment and Workplace Relations [DEEWR], 2011; Whitefoot and Olson, 2012).

While calls for improved graduate preparedness may have been characteristic of sectors reliant on emergent complex technologies (such as digital media, biotechnology and some manufacturing sectors), it is now more pervasive across business, commerce and industry (Skills Australia, 2011; DEEWR, 2011). The inroads of information, communication and games technology into everyday business and industrial processes are serving to ever widen the skills gap but also to dramatically change workforce demographics (Autor *et al.*, 2003; Binkley *et al.*, 2010; Levy, 2010; Whitefoot and Olson, 2012).

From the Australian perspective, the concerns industry expressed regarding the employability of graduates have been voiced over the last fifteen years in government reports such *as Learning for life: Review of higher education financing and policy* (Department of Education, Training and Youth Affairs, 1998), *Employability skills for the future* (DEST, 2002), *Graduate employability skills* (Department of Education, Science and Training, 2007), *Skills for prosperity* (Skills Australia, 2011) and *Employability skills and attributes framework* (DEEWR, 2011).

An important emerging element in the debate around the widening skills gaps is the lack of enterprising (or entrepreneurial) skills in graduates to support business agility (Moreland, 2007; National Association of Colleges and Employers [NACE], 2009; Skills Australia, 2011) and the need for education programs to address the deficiency (EC, 2003; Whitefoot and Olson, 2012). The benefits of curricula that boost national entrepreneurial capacity and impart enterprising skills have long been noted in the academic literature (eg, Gibb, 2002), policy documents of governments worldwide (eg, EC, 2003) and reports from high-level think tanks (NA, 2007; EC, 2009; Organisation of Economic Cooperation and Development, 2009; World Economic Forum, 2009). The need for education to instil an entrepreneurial mindset, especially in graduates of the science-based and technical disciplines, is a common thread in order to build foundational platforms for knowledge-based economies (EC, 2003, 2006, 2008; NA, 2007; House of Lords, 2012; National Institutes of Health, 2012). Such calls are recognition that skills underlying entrepreneurial activity (i.e., the enterprising skills of risk-taking, opportunity recognition, action-orientation, drive to succeed; Gartner and Vesper, 1994) are important for career success of the individual as well as future business sustainability through innovation that is both systemic and sustainable (Christensen, 1997).

The question remains as to how to deliver the skills underpinning the entrepreneurial mindset to undergraduate students in the Australian context (Collet, 2011).

A 2010 Snapshot @ University

In 2010, the Australian contexts of EE mirrored to some degree those evidenced in the US and the EU and these approaches fall into a number of broad models. At the undergraduate level in Australia, most Faculties of Business offered mainstream generic subjects that taught the theory of entrepreneurship and innovation as components of undergraduate degrees. Theory was also the focus in the graduate sector served by Master of Commerce degrees and/or the prestigious and ubiquitous Master of Business Administration. For applied entrepreneurship, RMIT and Swinburne University of Technology had dedicated Bachelor of Business degrees that allowed students to learn business and entrepreneurship while building their own business venture. At the University of Tasmania, the entrepreneurship major within the Bachelor of Commerce focused on new venture creation as well as instilling the entrepreneurial mindset with activities built into existing curricula (Jones and English, 2004; Hegarty and Jones, 2008). UniSA, on the other hand, offered a one-year Honours degree in entrepreneurship with similar intent targeted to business graduates.

Outside of the Business School environments, however, the focus was on entrepreneurial practice and the offerings were mostly limited and fragmented. In the higher degree research student sector, universities provided small courses, workshops or government-sponsored on-line courses in innovation commercialisation (e.g., the Graduate Certificate in Innovation and Commercialisation and the Commercialisation Training Scheme). The Entrepreneurship Commercialisation and Innovation Centre of the University of Adelaide conducted the Graduate Entrepreneurial Program instilling entrepreneurial skills for technology commercialisation.

Undergraduate entrepreneurship subjects were *usually* limited to the introduction of business planning, management and venture financing topics bound together with case studies as a one-semester course in the final year of a degree program. The subjects achieved their aim of increasing awareness of entrepreneurship as a career choice but there is little evidence of resultant entrepreneurial activity (Galloway and Brown, 2002; Matley and Carey, 2007) and a recent study reports a negative impact on entrepreneurial intent (Oosterbeek *et al*., 2010). Increasingly, discipline-based projects spanning two final year subjects focused on creativity and innovation and included elements of entrepreneurship and new venture creation as student teams developed ideas into potential products. The emphasis was usually on the creative process with little opportunity to move the product through to development (entrepreneurship) or realistic attempts at market research opportunities. This short-term and naturally superficial apporach endows a general feeling of frustration amongst students and staff involved (Silvernagl and Schultz, 2005) as the semester ends.

In a science and technology context, the Bachelor of Biotechnology Innovation at QUT addressed entrepreneurship and the business of biotechnology science (Collet and Wyatt, 2005). Graduates were targeted for careers in the innovation commercialisation support framework rather than act as innovators/inventors although they are highly inclined to behave in an enterprising fashion. The degree was terminated in 2010 as a consequence of perceived low student enrolments although the outcomes were highly praised and

welcomed by an industry that could only absorb a limited number of graduates in any event.

Absent from the Australian landscape at the time was a broadly-targeted model of EE program found commonly in US higher education institutes and increasingly adopted across the EU; especially in the UK (e.g., <www.nacue.com>). Entrepreneurship clubs comprise mostly extra-curricular activities (e.g., seminars, networking events and business plan competitions) that serve to raise awareness of the potential of entrepreneurship and an entrepreneurial lifestyle. These clubs are mostly informal, student-driven and, consequentially, rely on the efforts of a few dedicated people to maintain momentum.

The QUT Innovation Space was an attempt to fill a vacuum in the Australian university environment by building an EE program that served the needs of the undergraduate community.

Genesis of the QIS Project

In 2009, the Australian Learning and Teaching Council awarded a Teaching Fellowship to the project leader (Collet, 2011). The fellowship investigated entrepreneurial skills and their teaching from two perspectives: what skills Australian knowledge-intensive industries were seeking and how international exemplars were delivering entrepreneurial skills. International contexts of EE, across tertiary education institutes in the USA and the EU, were investigated to explore the structure and processes of the programs, the outcomes and what audiences were targeted. Both sides of the coin were considered important to the design of Australian-based EE programs.

As outlined previously, absent from the landscape of Australian universities are the broadly based extracurricular models of EE programs that exist in the higher education institutes of the USA and the EU. While the ALTC Teaching Fellowship afforded the opportunity to examine various models, there still remained the challenge of developing and implementing a model for an Australian higher education context. This challenge became subject of the ALTC Priority Project grant: The QUT Innovation Space.

In drawing widely on the international best practice exemplars studied during the Fellowship (Collet, 2011), several themes emerged as important drivers in capturing and fostering entrepreneurial potential in students:

1. Programs followed learning-by-doing approaches (the heart of entrepreneurship according to Gartner and Vesper, 1994) and theory without a real world application is considered of little importance in this arena.
2. Programs focused on new venture creation.
3. Programs mostly sat outside of curriculum as the activities do not easily sit inside the university requirements for conducting a course, although several successful Master's programs exist in the USA and EU (Barr *et al*., 2009; Thursby *et al.,* 2009; Collet, 2011).
4. Training in entrepreneurial skills is implicit, rather than explicit, in the process with the expectation that skills are attained by the end of the program.
5. A physical meeting space underpins a sense of belonging and is the linchpin of

networking activities.

6. Cost-effective means of delivery underpins the nature and diversity of offerings and sustainability of any program.
7. Collaborative efforts that span across and between organisations increase the potential for sustainability.

The QIS is an Experiment!

The QIS was intended as an extra-curricular platform that would deliver training and skills in creativity, innovation and entrepreneurship. Such platforms should be complementary to, and supportive of, the activities existing in the curriculum. Although the target audience was predominantly the undergraduate student cohort, staff and postgraduate students were also recognised as stakeholders.

In this instance, the choice of approach was extra-curricular as a curriculum-based platform would require design within a rigid scaffold dictated by university learning and teaching framework that restricted flexibility to experiment and would encumber considerable paperwork to implement.

Although extra-curricular EE platforms exist in a variety of forms in the USA and the EU (Collet, 2011), they did not exist in Australia in 2010. This is what made the QIS both an interesting and challenging project. What works in the international context may not work in the Australian university landscape for a variety of reasons:

- Australian universities are amongst the most competitive in the world, and this permeates the academic culture, both within and between higher education institutes.
- Many international EE programs in the EU are initiatives originating in Chancellery and have significant input and support at the highest levels of university governance, or, in some cases, are funded externally. A similar level of interest or support for such initiatives was not overt amongst the hierarchy of Australian universities when this project commenced at a time of considerable economic instability.
- In contrast to the USA, and to some degree the EU, Australian universities have little emphasis on the co-curriculum or extra-curriculum, preferring instead to draw all student-centred activities into the course curriculum and award credit points. This has built a culture in students that focuses on short-term gain and forsakes other avenues of learning that may ultimately provide the added skills demanded by industry for successful careers. Such an approach also reinforces the silo structure of Australian universities, as there is little incentive to collaborate across faculties.

Given that a university-wide platform for EE was an untried approach in the Australian university landscape, it warrants repeating that the QIS project represented an ambitious experiment in learning and teaching. The experiment tested not only the reception and perceptions of the student cohort to EE but, importantly, the university attitudes and responses, from all levels of university operations, to a program being built at the ground level of the student interface.

Chapter 2 – Then & Now

What the QIS Wanted to Be (When It Grew Up).

An early statement of purpose goes as follows: *the QIS aims to facilitate the successful development of creativity/innovation into intellectual capital and commercial or social products.*

The QIS was modelled on an incubator approach, not unlike many of the international exemplars investigated and thus the intended endpoint was the product as invented by the undergraduate student. Overall the goals of the QUT Innovation Space were two-fold; to:

- Facilitate the development of new enterprises with progressive, environmentally-aware products that serve the needs of the community, society and the economy, and
- Encourage entrepreneurial and enterprising approaches, behaviours and attitudes in students across QUT.

A goal was to value-add to the creativity and innovation at QUT and of the Brisbane region by building, developing and value-adding to ideas with a view to new product development and venture creation. We thought of the QIS as an ideas incubator as well as a business incubator. Brisbane had a number of commercial business incubators already in place, and at some point post-prototyping the nascent businesses in the QIS would transition into the commercial incubator entities.

The QIS was to be a teaching space designed to involve students, undergraduate and postgraduate, in the process of entrepreneurship to build the businesses of tomorrow. The QIS would provide infrastructure to help aspiring student entrepreneurs evaluate their ideas, build prototypes while imparting the elements needed for a successful business. As a bottom line, the QIS would offer student businesses sustainability beyond business plan competitions.

The QIS would have two outputs:

- New student ventures, and
- Instilling students with highly developed entrepreneurial skills.

Our reasoning went something along the lines that a pipeline of student businesses would attract attention and inspire other students within the university to follow an entrepreneurial pathway. Furthermore, an environment that attracted students and mentors from multiple disciplines and industries would facilitate a truly transdisciplinary approach to solving today's problems.

It was also envisaged that, not unlike the international exemplars, many of the activities would be student-driven. A project manager, with perhaps a part-time staff member to assist, could run the entity substantively.

The Initial QIS Project Aims

To develop an EE program that is university-wide, integrated into the university systems and integrated in purpose, the QIS project aimed to create, develop and/or implement the following:

1. A physical environment where students from all disciplinary areas across the University could interact as cohorts, teams and with mentors to progress innovation into products;
2. A virtual environment, with a central presence in the university information and communications technology (ICT) framework, to complement the physical and relationship components and provide public access and different levels of secure access for participants, materials and project discussion forums;
3. A network of relationships with engagement centred on students that drew upon the mentorship, interests and expertise of business, industry, entrepreneurs, government and academics;
4. A series of small-scale learning modules that teach skills in creativity, environment scoping, product development, market research, competitor analysis, intellectual property (IP) management, business planning, networking, communication, and business etiquette; and
5. A collection of activities such as industry seminars, networking and monthly update events and competitions (e.g., ideas and business planning) that support the mission of the QIS.

An Initial View of How Things Would Work

The proposed framework for the QIS took elements from several international exemplars. Essentially, the approach was to create a learning environment inside a 'traditional' incubator (Fig. 2.1).

The structure of the QIS was to take three parallel forms: a physical meeting and development space at QUT, a student and project-centred virtual environment complementing the physical entity and as a relationship between QUT students, businesses, entrepreneurs, government and the university.

Inside the QUT Innovation Space, students were to develop initial concept ideas into potential products. Support teams would coalesce around the young entrepreneurs with industry and academic mentors and interested students providing logistical support for product development and commercialisation. Skills development would focus on market research, competitor analysis, IP status and preliminary business planning.

Ideas could come from students, staff and postgraduate students where the IP was not owned by QUT, from entrepreneurs looking to develop new ventures or businesses donating non-core IP to the project, and from open innovation sources.

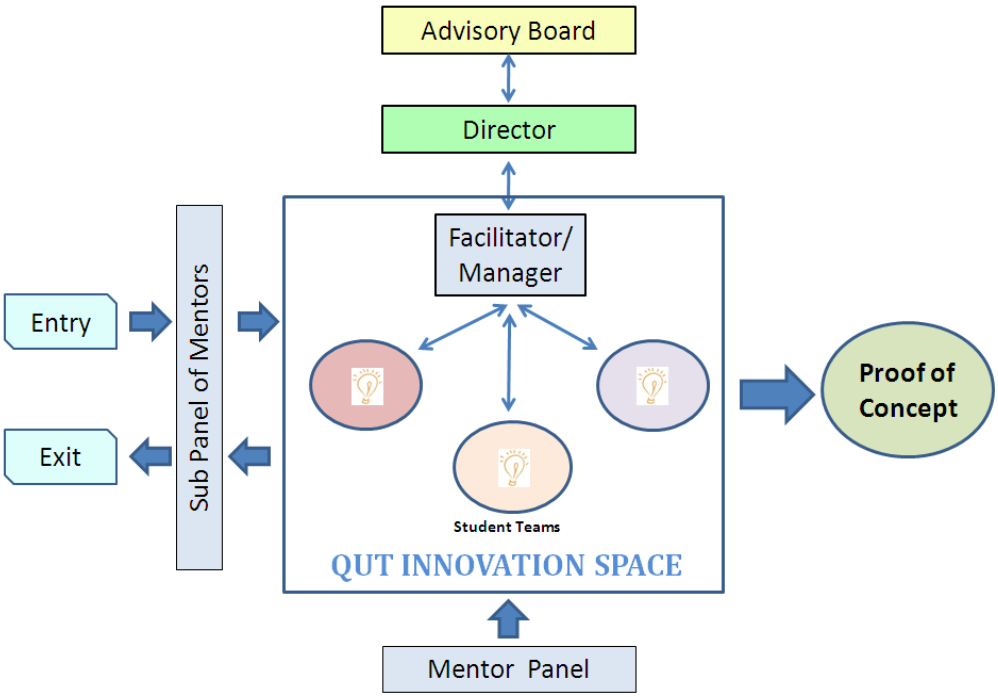


Figure 2.1 – Initial concept diagram showing the flow of how the QIS would operate.

QIS management would comprise a director (the project leader), an innovation facilitator (the project manager) and an advisory board. The QIS would draw upon a panel of entrepreneurially inclined individuals (or mentors) who wished to volunteer their time to facilitate progression of the student teams. A sub-panel of mentors would review and select student applications for entry into the QIS, recommend alternate approaches to student project proposals, recommend mentors for student team projects, examine equity issues related to projects, review progress of projects and recommend, where necessary, exit strategies.

The QIS would be open to any QUT student who:

- Is an innovator or entrepreneur with an idea of commercial or social potential who wishes to develop that idea into a product or service, and/or
- Wished to become involved in new venture development, to learn entrepreneurship and innovation commercialisation.

Student entry would be by application only. Student motivation being the key ingredient to entry. We were looking for students to take their concepts to the marketplace; students who wanted to make an impact by building sustainable enterprises that served the community and society. Students did not necessarily have to have the creative ideas to achieve this goal. Importantly, we were looking for students who understand that pain must precede gain.

Appendix A provides examples of the original application forms for mentors and students as well as additional excerpts from the first versions of the QIS manual.

What the QIS Evolved to Become.

At the end of 2012, the QIS had all the components in place listed under the project aims.

A physical space, based at the QUT Gardens Point Campus, provided an anchor for the QUT innovation and entrepreneurial community. The space was open to any student, at any time, and provided hot desks, a meeting room for confidential discussions as well as a plethora of white boards for students to work, brainstorm and collaborate. This space served to host the activities, outlined across the following chapters, that drew visitors from all faculties across the two QUT campuses of Kelvin Grove and Gardens Point, as well as students from other Brisbane-based universities and non-university peoples.

The QIS website, Facebook page and Twitter created a virtual presence for QIS activities and the QIS community. These sites, coupled with targeted e-mails to course cohorts and use of the QUT media streams, have been essential in advertising and driving engagement with the student community.

All QIS activities were coordinated by three part-time staff who managed the physical co-working space, a mentor program and a semester program of training sessions, events and workshops. Staff included a project manager (60% time commitment), an administration officer (40% time commitment) and an events coordinator (40% time commitment). Although each was responsible for a major area of activity, there was considerable overlap of duties. At various stages, short-term part-time 'Engagement' staff were brought in to develop projects, such as the mentor relationship or the business starter kit.

Figure 2.2 – QIS peoples: Jessie Roberts (left) – Project Leader, Sal Castles (centre) – Administration, Alex Selivanova (right) – Engagement.

Each semester a program of training sessions, events, speakers and workshops was rolled out and a mentor program was available to support students who were developing a product, technology or business. The gamut of QIS activities was diverse in nature (detailed in Chapter 5); involving industry, partners, entrepreneurs and academics, and addressed all points of the product development pipeline but with an overall emphasis on fostering the development of entrepreneurial skills and perspectives in undergraduate students.

Many of QIS's workshops, events and mentoring were enabled through a network of industry relationships with both individuals and organisations. A wide spread of local entrepreneurs and professionals donated time as advisors, mentors and speakers. While relationships with organisations such as Edgeware, the Microsoft Innovation Centre (MIC), and River City Labs (RCL) enabled larger high-profile events and activities to have greater impact and reach due to the reputation of the partners and the resources they provided in sponsorship.

Essentially, the elements of the QIS, at the end of the project, match the initial aims of the project.

What changed substantially was the move away from a traditional incubator approach. This change began from the early realisation that a gatekeeper approach to training excluded, to a large degree, the very people the QIS sought to attract, help and train: the broader undergraduate university cohort. The original project vision was built on the assumption that there was a plethora of 'good' ideas, creativity and inventions latent within the undergraduate university level, and that these ideas were simply waiting for training and resources in order to be transformed into successful business ventures.

The assumption was flawed.

Yes, there were entrepreneurial students with a wealth of life experience and fully developed ideas ready for commercialisation, but they were few and far between. What was more common, however, was the student with an interest in entrepreneurship and a half-baked idea that their friend and family thought they were a little crazy for pursuing. These students were the majority. They were excited about giving something a go, they didn't know where to start, most of their ideas lacked commercial viability and were undefined lofty visions. These students lacked the life experience, skills, confidence and networks needed to validate, develop, resource and implement their ideas.

It was the readjustment of our initial assumption that directed the QIS activities from turning ideas into successful products and services to one of giving students the tools and skills to develop, validate, resource and implement an idea.

Under the original stage-gated incubator model of QIS operations to selecting people to enter the QIS, such students would be excluded from the QIS reach.

The following chapters describe the activities of the QIS as well as the evolution of the project over the two-year period.

Chapter 3 – Outfitting the QIS

A Physical Space – The Importance of Placemaking

Placemaking was originally an architectural term that refers to a process of creating places that will attract people because they are pleasurable and interesting. An enjoyable and inspirational space is essential to attract and engage entrepreneurially inclined people.

A central theme reiterated throughout the study of international exemplars was the need for a recognisable drop in space to provide a sense of belonging and to facilitate networking activities (Collet, 2011). Networking is a priority activity for entrepreneurs who glean information, advice and support from other like-minded individuals.

A dedicated space provides a place for like-minded individuals to cross paths and the conversations that occur in that space validate their ideas and motivation to do something different or create something new. Many students came to QIS feeling 'silly' about wanting to do something with an idea. Although everyone admires the icons of Jobs, Zukermann and Branson, for example, there is a cultural pressure in Australia that trying to create a business out of an idea is a waste of time or destined to failure or not the normal path to follow. For QIS users, many times just listening to someone else's idea provided a self-validation of worth.

It is worth making a brief mention of how the QIS came together as a physical entity.

A physical space was granted by the university in what is termed the 'decant space' – where staff are moved during renovations of buildings. The actual space of 90 m^2 on the second level of a heritage building (i.e., high ceilings, wooden stairs and banister, no lift, decrepit conveniences, and retro-fitted air-conditioning that was louder than any presenter) was equally split between one office and two interconnected teaching activity rooms. Nonetheless, there were available high throughput printer/copier, high-speed Internet connections and Wifi, and plenty of cupboard space.

Furniture, sourced at low cost from the QUT second hand furniture storage area, included desks and chairs for staff, a board table for meetings, stackable tables that allowed flexibility of seating during activities, 30 stackable chairs, bookshelves, fridge, microwave and large round coffee table. Computer and audio-visual equipment included four old Apple Mac computers, a Sony data projector and a speaker system; all were donated from the disposal storage area of the Faculty of Science and

Technology. Additional computers consisted of two desktop computers and an Apple laptop computer for staff, and were provided by the Project leader.

The (lockable) office space contained three desks/chairs and the board table, which became an *ad hoc* student desk for projects and visits. One of the outer interconnected rooms became a tearoom (of sorts) with tea, coffee and kettle to accompany the microwave and fridge. The large round coffee table served as the centre of many of the small-scale activities. Bookshelves in the 'tearoom' housed books, magazines and videos donated by visitors.

The second room become the main meeting room, housing several large (2.4 m X 1.2 m) whiteboards attached to the walls. The computers stood on the stackable tables against the walls. The Sony data projector was attached to the roof, a screen to another wall and cables run to the corner of the room to allow connection to laptop computers for presentations.

As the decant space was empty, the QIS adopted a policy of 'mine, mine, mine'. With increasing levels of activities that were diverse in nature, the QIS expanded into adjacent rooms as the demand arose. A small meeting room was outfitted for meetings of a confidential nature, mostly between the IP lawyer and students. Large adjacent rooms were taken over for frequent workshop spaces or to house teams working on projects. A wide corridor became an informal meeting area.

In the evolution from a traditional incubator environment to a co-working space, the QIS adopted an open door policy. Students were encouraged to drop in and speak with QIS staff at anytime. The QIS was open for use by students for as long as the building was open (8 am – 10 pm weekdays).

A Virtual Presence

An initial aim was to integrate the QIS web presence into the ICT university systems. The primary aim was to gain a high profile position on the university web home page, or close to the main homepage, to facilitate advertising and across faculty collaboration. One priority was to steer away from perceived faculty ownership and all that this encompasses. Secondary aims were to draw on the alumni networks and the university support for the project. For the six months prior to the project, discussions were held with various QUT departments towards incorporating the QIS platform into existing systems. After nine months of discussions it was clear that integration was not possible for a variety of reasons.

The lofty expectations of integration arose from our ignorance of web governance surrounding the university systems. Also, many ICT systems within a university fail to talk to each other or were systems dedicated for a purpose that could not facilitate QIS intentions.

From the perspective of integrating in the university systems to avoid apparent ownership, university and faculties maintain tight control over web pages as part of web governance strategies and processes. Under such frameworks, pages near the top of the web hierarchy feature Chancellery owned initiatives. Even within the Faculty of Science and Technology (FaST), the project was considered external to core (faculty-directed) activities.

Figure 3.1 – The initial QIS URL was clumsy, unworkable and implied faculty ownership.

The QIS was given a home page buried deep within a faculty structure with the rather clunky URL: www.scitech.qut.edu.au/industry-community/qis. Such a location indicated ownership by a faculty and thus some elements of QUT staff were dis-inclined to engage with the QIS. These staff perceived that credit for 'output' or 'activity' would go elsewhere and diminish their own standing within their faculty. Given the URL featured on all advertising materials, the QIS was perceived as a FaST activity and that hindered relationship building. [Indeed, *perceived* competition within and outside of the university became an issue that worked against a trans-university platform for the life of the project.] Students visiting the QIS commented on science ownership, some even discounted relevance to their own entrepreneurial endeavours.

The solution was simple and effective. The QIS web presence moved off shore to a private web-hosting site with a sensible URL: <www.qutinnovationspace.com>. Consequently, QIS staff maintained the web site with the aid of information technology (IT) – savvy students. The faculty website was re-directed to the external site. Technically speaking, QUT does not condone offshore web sites carrying their logo. Until June 2012, Google searches using the search term 'innovation space' returned the QIS at the top of the global search list.

Advertising QIS Activities

QIS events and happenings were advertised through:

- The QIS website: <[www.qutinnovationspace.com>.](http://www.qutinnovationspace.com)
- Facebook: QUT Innovation Space.
- Twitter: <twitter.com/#!/QUTInnovation>.
- Targeted, course-wide e-mails.
- A large chalkboard located outside the QIS for daily event notifications.
- Streaming video through campus notification monitors.
- Printed signs across campus noticeboards.

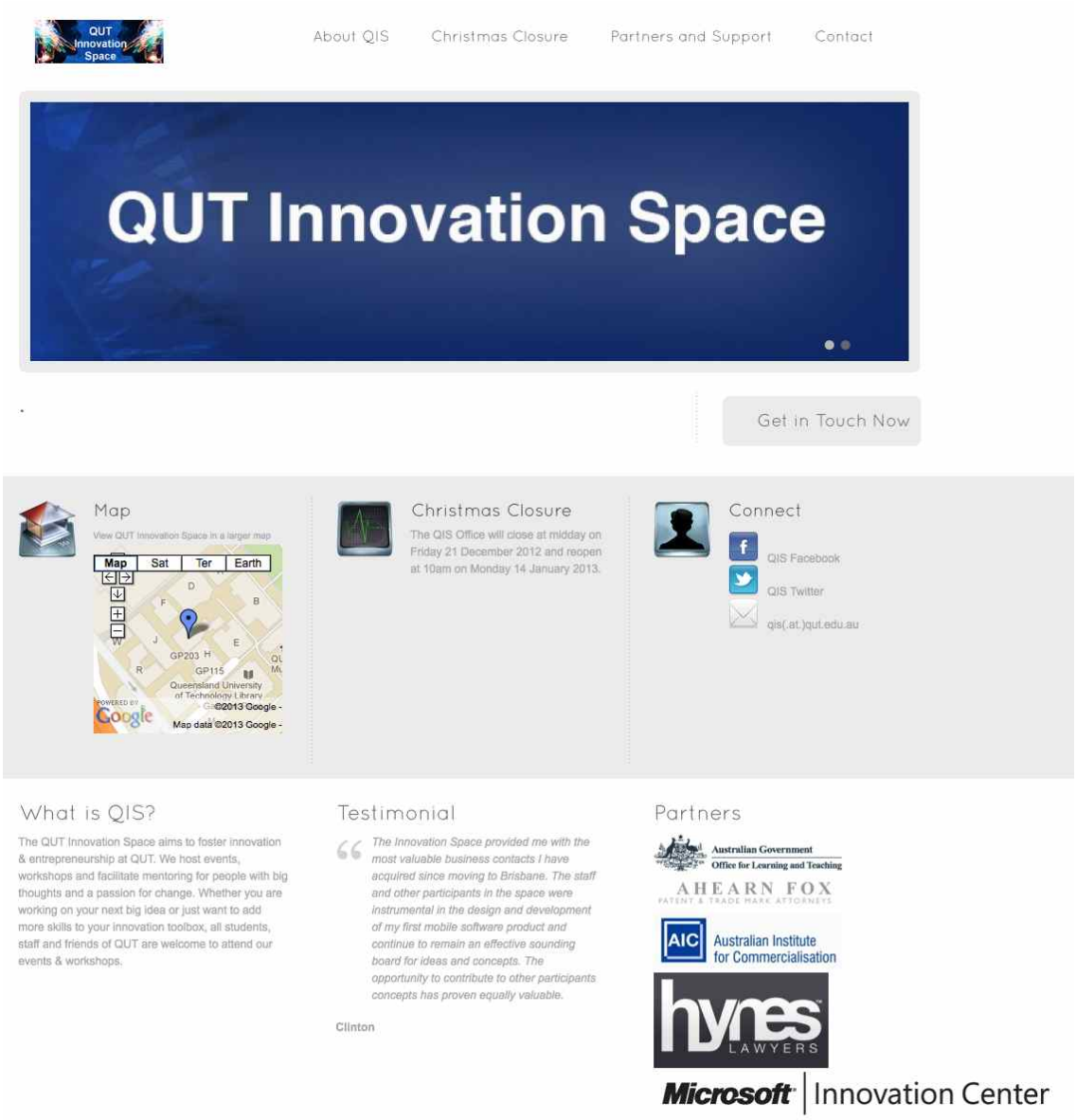


Figure 3.2 – The QIS website (left) proved to be the most labour-intensive method of advertising as specialist IT knowledge was needed to be applied as the site evolved. Of available approaches to form a virtual community, the web site also proved the most expensive to maintain. Recordings of QIS seminars and workshops were made available on the web site.

Figure 3.3 – The QIS Facebook page (above) and Twitter (below) sites were a cheap, effective and fast means of disseminating information about events and activities. As standard for these sites, considerable staff resources went into monitoring and replying to student traffic.

A role of the QIS administrative assistant was to distribute the advertising materials for QIS activities. This person would post to the website, Facebook and Twitter. The administrative assistant was also able to subscribe to the course e-mail distribution lists through central QUT e-mail subscription lists and e-mails went to all courses on a weekly basis.

A significant proportion of the drop-in visits were a consequence of passer-by interest in our large chalkboard announcements on a board placed in a student thoroughfare outside the QIS, next to a coffee shop.

Figure 3.4 – A large board was commandeered from a university construction site and painted with blackboard paint; once the construction company had finished with it, of course.

Disseminating the Initiative to Faculties

To make faculties aware of the QIS project and the types of activities it presented, short (10 minute) seminars were delivered to most faculty L&T committees across QUT and a number of related university-based committees (such as the Innovation Group, an ICT-centric committee).

From these seminars, permission was received to advertise through course e-mail distribution lists and to present to targeted classes in subjects of relevance and where students may be interested in QIS activities. Three-minute presentations and advertising fliers about the QIS were delivered to ten – fifteen subjects during the first week of semester 1 and again in semester 2 in 2011.

This approach to raising awareness about the QIS did not appear to have any impact of consequence. In semester 1, one student indicated a visit arising from the in class pitch. There was no evidence of visits generated as a consequence of the semester 2 pitches to classes.

The content of the pitches did feature the QIS incubator model that became supplanted in favour of a more open door policy during early semester 2 of 2011. It may just be that the notion of new venture creation *per se* was not something attractive to the students (see Chapter 4).

Chapter 4 – Evolving Structures and Approaches

As with any start-up entity, which is precisely what the QIS was, the QIS evolved to address the needs of the client base. Start-up companies are also highly concerned about cash flow, outcomes versus inputs and achieving efficiencies to ensure the target client base is reached and serviced; such concerns also drove the evolving operations of the QIS. This chapter describes evolution of the QIS philosophy, structures and approaches but also highlights underlying issues that drove some of that evolution.

The Entrepreneurial Pathway is Not Linear

The entrepreneurial process is often portrayed as a seed (idea) becoming a plant (product). Lost in the analogy is the simple fact that less than 1% of seeds will ever germinate and grow to become mature plants.

Similarly, for simplicity's sake the process of product development from ideation to commercialisation is often portrayed as linear. Popular stories promoting the success of recent entrepreneurial icons such as Bill Gates, Steve Jobs, Richard Branson, Michael Dell, Jeff Bezos, Mark Zuckerberg, and Larry Page, amongst others, tend to feature the single idea that became the billion-dollar product.

Student perceptions of the innovation and commercialisation pipeline are thus, naturally, often naïve. Although text and self-help books highlight the re-iterative, analytical and, ultimately, stage-gated nature of the pipeline process (see Appendix G for a list of relevant books), these resources are not something the student often seeks out for information. (At various points in the QIS project, cheap 'how-to' textbooks were given to students who completed courses or activities that spanned a number of days).

Even in textbooks the stage-gated process is drawn in a linear fashion with limited reiterative steps as each component is developed, defined and put into place.

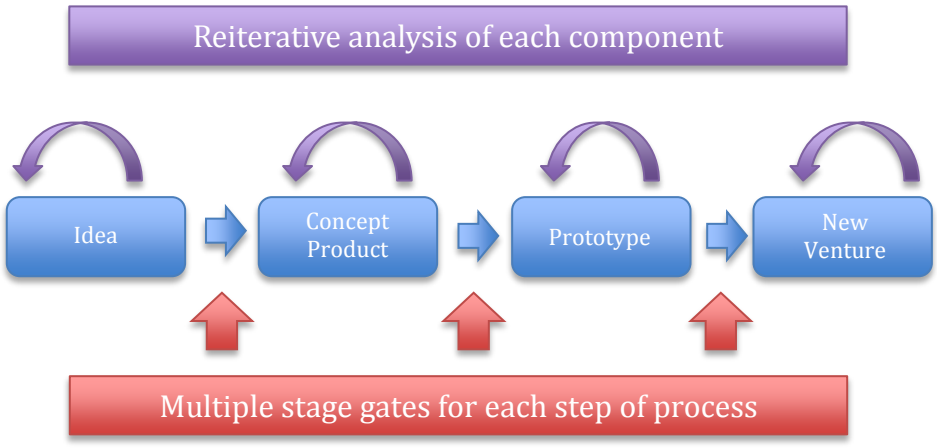


Figure 4.1 – Portrayal of the entrepreneurial process as linear with multiple stage-gates.

The reiterative nature of the process is highlighted and discussed, but the novice often is convinced of product potential even before the validation exercise begins. While enthusiasm abounds, the shock often comes early in the validation process when the reiterative, and often intense, questioning of the project components begins. Once an idea has been deemed un-commercial, usually by the application process of a traditional incubator, there are no further avenues for a student to engage and develop their skills, resources, networks or thinking. This is a valid outcome if the performance indicators of incubators are based on creating successful ventures, as it is not the role of an incubator to educate an enthusiastic, yet naïve, student. However if the goal is entrepreneurship education, then there is a hole in the ecosystem. Where do enthusiastic, yet inexperienced, students engage to cut their teeth on the basics of entrepreneurship?

In the initial stages of idea development, the key components that an emerging entrepreneur must learn to address can be generalised as:

- Personal value and motivation
- An understanding of the new product development and commercialisation process.
- Value proposition.
- Market validation and the commercial opportunity.
- Business legalities: IP strategy, business structures, contracts, etc.
- Business model.
- Prototyping and developing a minimal viable product.

All components are interconnected and an evolution in any one component affects the others. For example, changing the IP strategy may require a re-evaluation of the business model, or the identification of a new competitor may require a complete revision of the commercial opportunity. Thus, at any one point, evaluation of any facet or component may necessitate returning to any prior point in the process; in actuality, continuously cycling through the process is a given for any number of reasons.

Rather than a linear progression from idea to commercial product, the entrepreneurial path can best be conceptualised as a series of concentric circles centred on personal motivation and goals that embody self-determination in life and career. From this core, comes the idea for a potential product. While the pathway may begin in the core, it is not a linear passage to the outer elements of the process.

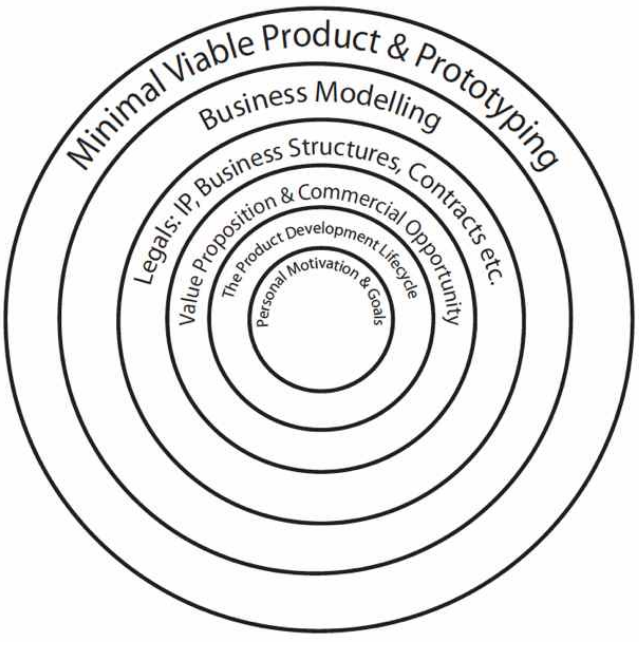


Figure 4.2 – In describing the student experience as an emerging entrepreneur, it is best to think of a series of concentric circles.

The commercially viable business that lays latent within an idea emerges not only through a process that is reiterative over any one component but also one that oscillates back and forth across the various components. The typical student pathway, observed in the QIS (see also next section), can be portrayed more as a spiral around the various components arranged as concentric circles. The idea (as bought to the QIS by a budding entrepreneur) becomes a vehicle for students to practically learn about each of these components.

In this model, based as it is on the experiences of the QIS staff, the common beginning of the entrepreneurial path of students does not usually begin in the core and the path they implement to developing their idea is often sporadic and inefficient. The student often feels they don't know where to begin, what to do next or even what has to be done. With no larger perspective of the idea development process, where they are in that process or why they are motivated by this idea and what they want from it, the emerging entrepreneur often struggles when they hit challenges. A commercial opportunity may be visible to the student but they do not understand their motivation to become an entrepreneur or why this idea particularly inspires them. Without reflection on their motives and goals, and a sense of orientation in regards to the process they are currently working through, the first significant brick-wall hurdle often becomes insurmountable in their minds.

At any point along the journey the idea may be abandoned. However, it is not long before the entrepreneurial student has picked up another idea and again begins to cycle through the components of the product development again. Each time the journey begins, the traveller carries with them skills, perspectives and contacts picked up in their last visit to this process. With each subsequent idea the student becomes more efficient, more skilled and more competent.

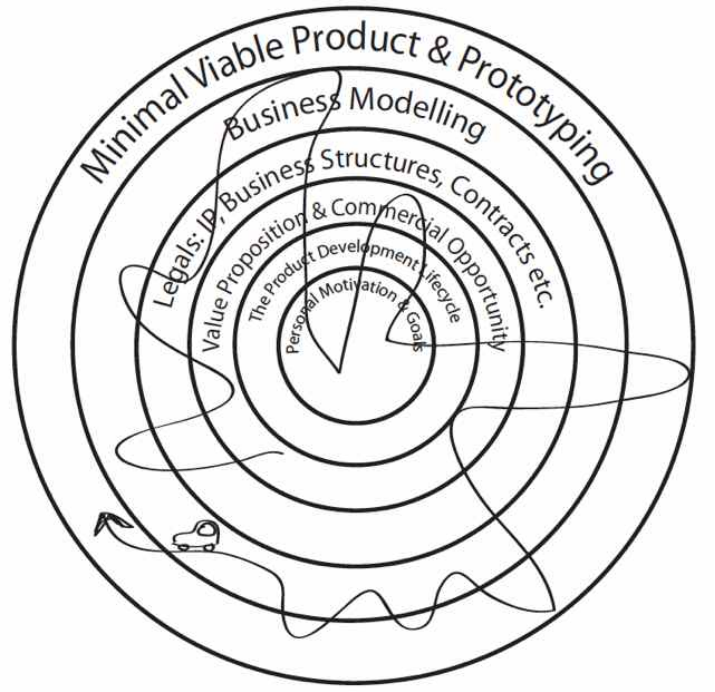


Figure 4.3 – The actual pathway of the emerging student entrepreneur is one of learning that the path they travel is not linear and many ideas will need to be constantly re-evaluated at every step of the process. Sometimes it is one step forward and, at other times, it is ten steps backward as they learn the skills of concept validation, product prototyping and market needs.

In a concentric circles model, the path of the emerging student entrepreneur emphasises not just the progression along the pipeline (a mono-dimensional term in itself), but the lateral steps taken at each stage as various approaches are considered, accepted and discounted, as well as the regression back towards the core as potential products or approaches are not validated at any one stage.

Many times the greatest thing that is learnt through this process is how to fail and/or (importantly) pivot an idea into some other potential product. The more a student embarks on the development process, the more they hone their skills to quickly evaluate if an idea has potential and is worth investing their time, energy and resources.

A Focus on Skilling People Not on Idea Progression

A major determinant of the QIS's evolutionary pathway revolved around the quality of student ideas. A significant number of visitors to the QIS had a poorly conceived idea they thought could be a potential product of some sort. The problem lay not with the ideas themselves but rather in not having the skills to validate and refine the initial idea into a concept product, and then to execute the entrepreneurial process. Enthusiasm was not lacking.

What concurrently became evident was the role the 'idea' played in enabling access to learning. The idea becomes the vehicle that allows students to travel through the product development and commercialisation process. As they do so, students develop skills only accessible through learning by doing.

While most 'ideas' are not successful (not in their first iteration anyway), the people who carried them into QIS demonstrated that they also carried with them the beginnings of an entrepreneurial perspective and initiative. The idea, regardless of it's potential, was an essential enabler in their learning.

The stage-gated process of entering the QIS, as originally developed under the incubator approach, did not actually encourage the entrepreneurial process. Indeed, student visitors were discouraged by the notion of a closed-door policy. The students were at the door, so to speak, out of a combination of curiosity and initiative, with ideas half-formed. Students did not want to be confronted with forms, structures and restrictive guidelines. They wanted help to further validate the idea. Simply put, the initial QIS structure and process dealt with ideas not people. In addition, the QIS was looking for ideas further along the pipeline than most students had at the undergraduate level, alienating a significant portion of the client base.

It was also becoming clear that the proposed QIS structure and process would in fact perpetuate the very conservatism that pervaded the current (traditional) innovation and commercialisation pipeline. In essence, the pipeline process itself had been bereft of innovation and a stage-gated process can and does stifle innovative business propositions well outside the box. As discussed below (Chapter 8), during 2011 and 2012, the innovation ecosystem evolved substantially as new models and entities based on the theme of co-working appeared in the Brisbane environment and elsewhere in Australia.

Consequently, the focus of the QIS quickly moved from building businesses as a means of instilling a broader entrepreneurial culture to a more holistic view of building entrepreneurial capacity in the student population.

The QIS creed became:

- We do not build good ideas. We foster the skills needed to evaluate, execute and develop an idea.
- We do not create businesses. We build the capacity to turn an idea into a business.
- We do not create entrepreneurs. We foster a community of entrepreneurs, intrapreneurs, inventors and innovators.

The change of focus from new venture creation to building entrepreneurial capacity was accompanied by a move away from the initial stage-gated entry to QIS activities and resources to an open door policy that served to cater for any student who sought QIS assistance or to engage in QIS activities. Students were simply encouraged to drop in and speak with the QIS staff at anytime. Students or student teams with ideas were encouraged to use the QIS facilities to progress ideas. The latter often simply meant holding team meetings in the QIS.

A re-focus did have consequences for the project. A university searches for benchmarks to evaluate the worth of an activity. An easy benchmark to measure is 'number of new businesses created'. In contrast, it is difficult to meaningfully measure the entrepreneurial intent and capacity building in undergraduate students (exit surveys are one method that stirs vigorous debate in the literature – they are always overwhelmingly positive but translate rarely in demonstrable outcomes; Galloway and Brown, 2002; Matley and Carey, 2007). Similarly, students in a subject are easy to measure; activities and outcomes of an extra-curricular platform are not. While the effort is high, measurable returns are not overt in a project of the nature of the QIS.

Strategies for Development of the QIS and its Activities

The development of both the QIS and its activities was embedded in continuous end-user consultation. Establishing a QIS User Advisory Group (UAG) as well as informal channels for collecting feedback from the QIS participants ensured QIS was up to date with the current challenges, needs and knowledge gaps of the students. Informal channels of feedback for QIS activities included:

- Asking participants at QIS events for verbal feedback and ideas on improving the activity (see Appendix A for a copy of the feedback form).
- Submission of a recommendation via the web site for an existing activity or a new activity.
- *Ad hoc* feedback during student visits to the QIS.

Highly engaged students were invited to participate in the QIS UAG that met once a month to provide feedback on the planned activities of QIS and contribute creatively to new activities and strategic direction of the QIS. The monthly UAG meetings were a platform for reviewing the planned semester program of QIS activities, testing new activities, maintaining a pulse on the student needs and

perspectives, strengthening engagement and sense of community as well as gathering feedback and creative input (ideas) in regards to new activities.

The UAG served as a platform to litmus test QIS plans prior to investing resources and proved to be a very valuable step in the development of the QIS program as many ideas came directly from the student cohort.

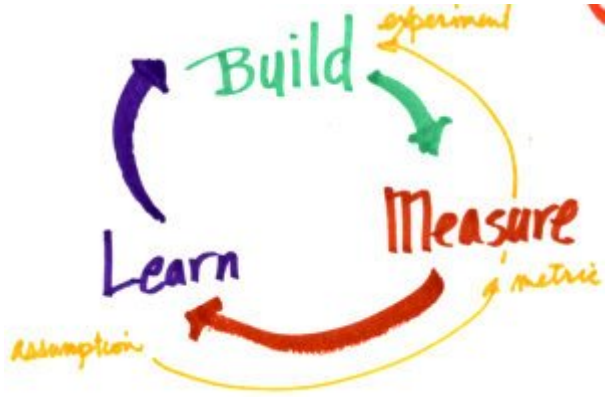
One common flaw in designing activities was to make them too complex. Students remained engaged with simple and short activities as they attempted to fit QIS activities into their increasingly hectic lives.

For individual activities, an action research and a development cycle based on the Minimal Viable Product (MVP) approach was adopted as follows:

1. Hypothesis/assumption (e.g., students need X skills)
2. Design simplest test possible (i.e., design a workshop/activity that addresses X Skills).
3. Test 1 (i.e., gather feedback from UAG).
4. Test 2 (i.e., run prototype workshop/activity).
5. Evaluate response. (e.g., how many students enrolled and how many attended? Gather feedback from participants: was it valuable, how can it be improved, should it be offered again).
6. Adjust hypothesis & begin cycle again. (e.g., implement recommendations from feedback. Change workshops or activity to reflect what was learnt from the test).

Figure 4.4 – The minimum viable product lifecycle (Eric Reis).

The concept of the MVP is a very simple framework/philosophy to develop a business or idea that reflects the wants and needs of the customer. It is also a highly valuable approach for the development of new products or services. A MVP is *a version of a new product, which allows a team to collect the maximum amount of validated learning about customers with the least effort* (Eric Reis, entrepreneur).



External Partnerships

As the QIS evolved, the breadth and scope of activities offered to students meant that QIS staff could not deliver them all. A number of partnerships developed and evolved across the lifetime of the project that facilitated delivery of a large array of materials to entrepreneurially inclined students.

The following six examples of partnerships demonstrate how the QIS could achieve its objectives while maintaining a frugal approach.

Ian Tannahill (Ahearn Fox)

As outlined in later chapters, IP featured as the most sought after areas of advice and support from both student enquiries and seminar attendances. The IP position of each student concept product is unique and the importance of delivering timely and appropriate advice is paramount. Simply directing the student to the patent databases to facilitate self-searching is an inadequate, although often used, approach. The complexity of the area requires strong links with law firms that specialise in IP.

The QIS was very fortunate in obtaining the services of Ian Tannahill, an IP attorney from the local patent and trademark law firm of Ahearn Fox. As a successful IP attorney, Ian was keen to 'give something back' to the community. Ian provided his services one afternoon a fortnight where he was available at QIS for students to book in one-on-one sessions for free IP consultations. All students coming to the QIS with a sufficiently developed idea were encouraged to make an appointment with Ian to discuss any IP concerns. Ian also provided a regular series of four seminar/workshops on various aspects of IP protection (see Chapter 5).

To Quote the Ahearn Fox Web Site: Ian Tannahill (from: <www.patentlawyerbrisbane.com.au/attorneys>

Ian is regarded by many as the most experienced trademark practitioner in Queensland. Ian represents many small, medium and large enterprises in Queensland and northern New South Wales, including a number of Australian "icons". He also represents a number of multinational corporations in patent and trademark matters and has earned a reputation for providing dedicated service to his clients. Ian is a mechanical engineer, with majors in manufacturing and marine engineering and has written patent specifications in many different areas over his twenty-five years in the profession.

Ian regularly presents at seminars and for members of the legal fraternity and universities in Brisbane.

Edgeware Creative Entrepreneurship

EDGEWARE

MAKE MONEY
HAVE FUN
CHANGE THE WORLD
CREATIVE ENTREPRENEURSHIP

Entrepreneurs-in-residence have a powerful impact on the mindset, behaviours and success rate of budding student entrepreneurs. The partnership with Edgeware provided both entrepreneurs-in-residence, through the presence of Michael and Ludmilla Doneman, and the opportunity to deliver formal training experiences across a spectrum of activities (guest speakers, workshops and courses). Edgeware had been running courses and consultancy exercises around creative entrepreneurship for some years (<www.edgeware.com.au>). The 'Build Your Business' courses were mostly funded by TAFE (Technical and Further Education) colleges throughout Queensland and northern New South Wales or were offered for private subscription. Graduates of the Build Your Business program, 'Edgies', could continue an on going relationship with Edgeware through personal coaching and training regimes. Edgeware also facilitated networking activities for their graduates.

Due to the nature of their private subscription courses, Edgeware ran the majority of their

programs at night or on weekends, and hired training and meeting rooms on an *ad hoc* basis. Edgeware saw an opportunity to work with the QIS to deliver their training programs while potentially building their consultancy services beyond Edgie graduation and expanding their product range. A location offered more opportunities to expand their business. Edgeware provided four Build Your Business courses free of charge to QUT students and staff per year, and hosted or engaged in QIS activities for up to two days a week. In exchange, the QIS facilities hosted out-of-hours Edgeware programs, coaching sessions and other activities around business development.

Edgeware also advertised joint QIS/Edgeware activities to the outside world (Fig. 4.5; see also the Edgeware advertising material in Chapter 5.

Deirdre Reeves (Qinnov8)

As a Director of Qinnov8 P/L, Deirdre spent many lunch hours and after hours sessions in the QIS, serving as a sounding board during planning phases and facilitating positive outcomes from the activities. Importantly, what Deirdre brought to the QIS was networks of entrepreneurs, innovators and helpers that furthered the QIS aims. Whereas Edgeware undertook many of the learning and teaching activities itself, Deirdre undertook to find speakers and presenters from amongst her network of contacts, in government and industry, who could deliver seminars and workshops. For example, Ian Gilbert (Manager of Commercialisation and Information Services in the Queensland Government) gave a number of presentations on innovation and Ian Tannahill (above) provided ongoing IP services and seminars to the QIS. These networks were essential for the day-to-day activities of the QIS.

River City Labs

River City Labs (RCL) is a non-for-profit co-working space for IT, Internet and mobile start-up companies. RCL provides desks for rent on a monthly basis where residents also have access to a mentoring community and a series of events, networking and up-skilling opportunities for entrepreneurs.

QIS established a partnership with RCL where the QIS project manager worked from the RCL co-working space one day a week and any QUT student that was interested could also spend that day working from a hot desk in the space. In addition, QIS facilitated several internships with local resident RCL start-ups (see Chapter 5). These internships provided students with an opportunity to be immersed in a start-up community and experience first hand what it is like working in a start-up, a very different environment than working with an established organisation or following a typical career path.

Figure 4.5 – Edgeware inhabited the QIS facilities in return for conducting seminars, training programs and coaching sessions. In turn, Edgeware also advertised QIS activities under their own banner.

EDGEWARE

Edgeware Creative Entrepreneurship is a small business development company that focuses on the personal qualities and capacities of the entrepreneur at the heart of a business. We are resident at the QUT Innovation Space, and offer informal courses and coaching as part of our commitment to the space.

Edgeware operates with a DNA characterised by honesty, courage, generosity, humour, compassion, ethical business practice and social responsibility. We believe that skilful, effective and responsible business can change the world.

Edgeware is not only a course, but also a learning environment and a community. It is productive and pragmatic, but is also affirming and great fun.

Make money, have fun, change the world!

Semester 2 Regular Events

Every 2nd Fri 2:20 – 3:30	**Creative Toolbox** Starting 05/08/2011 (wk2)
Every Fri 4 – 6	**Four.2.Six** Starting 29/07/2011 (wk1)
Every 2nd Wed 12:30 – 1:30	**Lunchbox Sessions** Starting 27/07/2011 (wk1)
Every Fri 10 – 3	**One to One Coaching Sessions with Edgeware** Please contact QIS to confirm availability and book a time

Events do not run in semester break of in Study weeks.
Please see QIS online calendar for more details: www.qutinnovationspace.com

EDGEWARE

www.qutinnovationspace.com, Facebook: QUT Innovation Space, Twitter: QUTinnovationspace, www.edgeware.com.au

Australian Institute of Commercialisation

An early and important partner for the QIS was the Australian Institute of Commercialisation (AIC <www.ausic.com>; Dr Rowan Gilmore and John Kapeleris). As innovation consultants, the AIC provide a number of courses, services and tools for the commercialisation of intellectual property into successful businesses. While servicing the local innovation community, the AIC also undertook to support the activities of the QIS by providing free seminars on all aspects of the commercialisation pipeline, prizes at events, such as market research packages worth $5,000 to student companies, and cash sponsorship for running events and activities. Prior to a restructure and their sale to QMI Solutions (see Chapter 8), the AIC provided strong industry support into the university to facilitate implementation of what was considered a different approach to a 'learning and teaching' project.

Microsoft Innovation Centre

In 2011, the Microsoft Innovation Centre (MIC) opened on the 18th floor of a building in the central business district of Brisbane. One of the activities of the Brisbane MIC office was to host the local version of the Imagine Cup (<www.microsoft.com/australia/imaginecup>), a worldwide competition aimed at tertiary students that fosters using technology to solve global problems. The competition itself targets IT entrepreneurs and favours the use of Microsoft products. Besides prizes of Microsoft products, the winners of the regional finals are taken to the global headquarters of Microsoft and compete in the international finals.

Faced with the need to access tertiary students, Emily Easterby of the MIC approached the QIS to help in promoting the event into QUT. As the relationship developed, the MIC hosted and sponsored QIS activities around IT entrepreneurship. QIS staff also worked with the MIC to develop a framework for their own activities (see Chapter 6).

Australian Innovation Festival.Org

As an entity working to gain a foothold in an innovation landscape, albeit a fairly empty scene in Brisbane in late 2010, the QIS essentially operated as a start-up company. The QIS needed exposure to the broader innovation community in Brisbane, networks to attract mentors and trainers, and to build some level of momentum.

The Australian Innovation Festival (AIF) as an organisation showcases examples of innovation and entrepreneurship from around Australia on their web site. The AIF picked up on press releases from QUT and featured QIS stories of student entrepreneurs, thus providing national exposure for the project. Such exposure subsequently drew industry people and student visitors into the QIS (Fig. 4.6).

An AIF festival (<www.ausinnovation.org/festivals/australian-innovation-festival>) is held each year in every capital city. QIS events scheduled during the AIF festival served to promote QUT training activities and student entrepreneurs to a broad audience from

around the region (Fig. 4.7).

Figure 4.6 – The AIF picked up on QUT media releases featuring the QIS and the entrepreneurial efforts of QUT students.

Figure 4.7 – Scheduling QIS events as part of the yearly AIF event expanded our target audience to include the general Brisbane public at a time when the QIS needed to attract industry mentors and speakers.

Some Advice on Where to Stop

Industry links and networks are an essential component of any EE program; industry participation provides the requisite badge of credibility from the perceptions of the students, and serves as a nucleus of industry contacts for networking and mentoring purposes. During the implementation phase of the QIS project (October 2010 – March 2011), an industry advisory board was established to provide strategic direction and advice. The Board comprised mostly players from the innovation and commercialisation industry in Brisbane including local representatives from the traditional incubators, research commercialisation offices and business angels (very early stage venture capitalists). The Board provided feedback, suggestions and insight into operational procedures.

It is worth noting that a significant portion of the board members disagreed strongly with QIS intentions regarding where the QIS role in student start-ups should end. Whereas, the original intent was for some level of incubation of the student company beyond initial prototype product (i.e., into the actual commercialisation process post-prototyping), opinion was provided that the QIS role should end at the initial prototype product stage or possibly earlier at the concept product stage. This effectively meant that there should be no new venture incubation and no QUT Business Hatchery (Chapter 7). Rather, the proponents suggested student companies should enter the existing traditional incubators at the point of a *potential* prototype product. Reiterative rounds and refinement of prototyping, based as it usually is on market research and testing, was something that should be confined to te traditonal incubator environment.

There were three reasons given in advancing this opinion:

1. The QIS staff were not qualified (i.e., did not have the necessary industry experience of generating successful start-ups) to extend the learning experience beyond the notion of a prototype product.
2. A measure of the real worth of a prototype product was whether it would facilitate entry into a traditional incubator (i.e., the step served as a stage-gate).
3. Any incubation within the university domain (i.e., such as the QUT Business Hatchery, Chapter 7) would impinge on the business interests of the traditional incubators within Brisbane region who gain their revenue through hosting and training the start-up company.

Although on the surface these arguments appear as self-serving given that the business interests of the Board mostly derived from the later stages of the innovation and commercialisation pipeline, they need serious consideration as the view highlights the issues of dealing with a long pipeline process and the resources required to address the continuum.

The point is not, necessarily, about the QIS being able to address the complete continuum but where on that continuum does the process pass from one regime of guidance to another. The intent of the original QIS was to draw the endpoint further along the commercialisation route (somewhere in the new venture domain after initial incubation) whereas the dissenting Board opinion was to draw the line sharply at the beginning of company incubation (see Figure 4.6) and a potential prototype product.

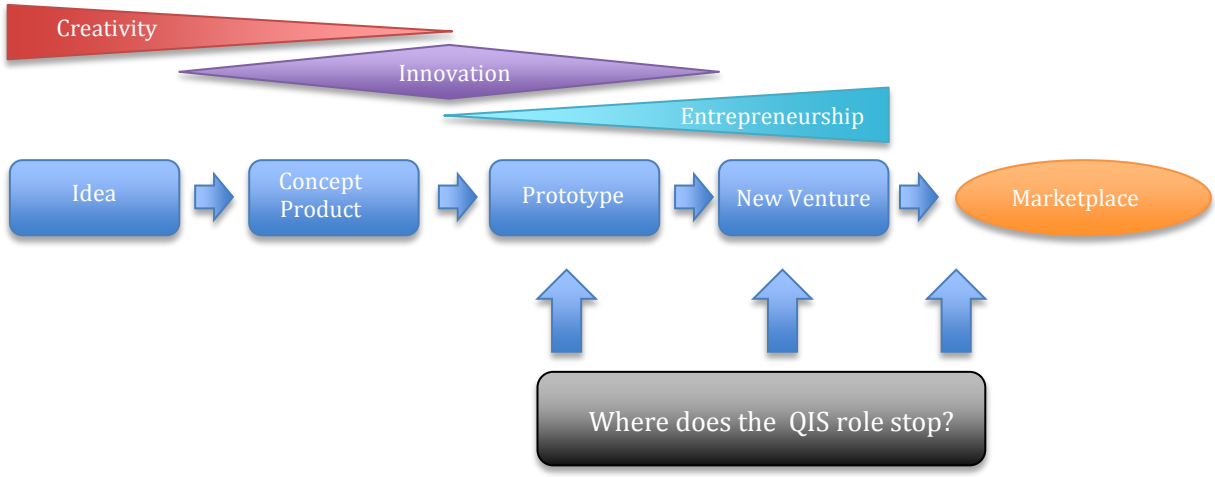


Figure 4.6 – Deciding where the role of the QIS EE programs ends was the hard part.

The further towards the end of the continuum, the more the resources (manpower, time, space) required to see a product reach the marketplace. The constraint, from the perspective of an exercise housed in a higher education institute where there are no monetary returns usually associated with these types of activities, extends beyond what the client (student) base demands to include how far resources can be stretched.

The Board also had a valid point in pointing out the lack of start-up experience for QIS staff as there is a correlation between experience as a coach of start-ups, and the eventual success in commercialising new ventures (Collet, 2011).

In countering the Board arguments, it was ventured that the industry mentorship program should provide for progression beyond prototype into actual commercialisation process. As pointed out in later chapters regarding the dearth of innovation in the actual pipeline processes, incubators often follow traditional (stereotypical) pathways of technology-centric commercialisation and it was clear from the examples of products entering the QIS that many examples of potential businesses would not fit the start-up techno-incubator model of a successful company.

Chapter 5 – QIS Activities: What, How & Why

The QIS delivered a spectrum of activities over the period of the project, from one-hour seminars by Brisbane-based entrepreneurs to five-day courses on how to build a business from an idea, from two-hour free-wheeling round-table discussions to interactive workshops that explored specific themes.

Events and workshops can take many shapes and forms and the QIS trialled just a few. The following outlines present the most successful and valuable events and workshops developed and trialled during the project and provides event descriptions of the most successful of these activities.

Based on attendance and feedback, the most successful events and workshops were (in no particular order):

1. Ideas & IP (workshop)
2. Pitching Practice (workshop series)
3. Thirsty Thursday (events)
4. Student Start-Up Night (events)
5. Design Thinking with Deloitte (workshops)
6. Story of a Start Up (guest speaker series)
7. Pitching Competitions (events/workshops)
8. Five day business course (course)
9. Innovation Boot Camp (two day introduction to entrepreneurship)
10. Open House (event/workshop/speaker series)

There were some not so successful activities as well. Developing a pitching workshop model, for example, that successfully engaged the students took several iterations, some of which attracted low student numbers (see Appendix E). Even so, engaged students were continually looking for something new to further hone their skills and so evolution of materials and development of new materials was an essential part of QIS activity. Some activities, although very sound in concept, simple in process and highly targeted, just failed to attract usage (see Student Innovation Exchange below).

The descriptions of the events and workshops include the marketing copy (as posted on the web site and e-mailed to courses), frequency of occurrence, size of target audience and some basic logistics. Each description is followed by a reflection on the activity.

As detailed in the previous chapter, a significant portion of time was devoted to developing new activities that were both attractive and of value to the entrepreneurial student. The same activities presented time and time again did not maintain student engagement – the student community expected evolution. As such, activities were under a constant state of review, including consultation with end-user groups, in order to maintain a level of excitement.

One issue that evolved throughout the project was the scheduling and frequency of events. A weekly schedule of seminars featuring successful local entrepreneurs was not as well

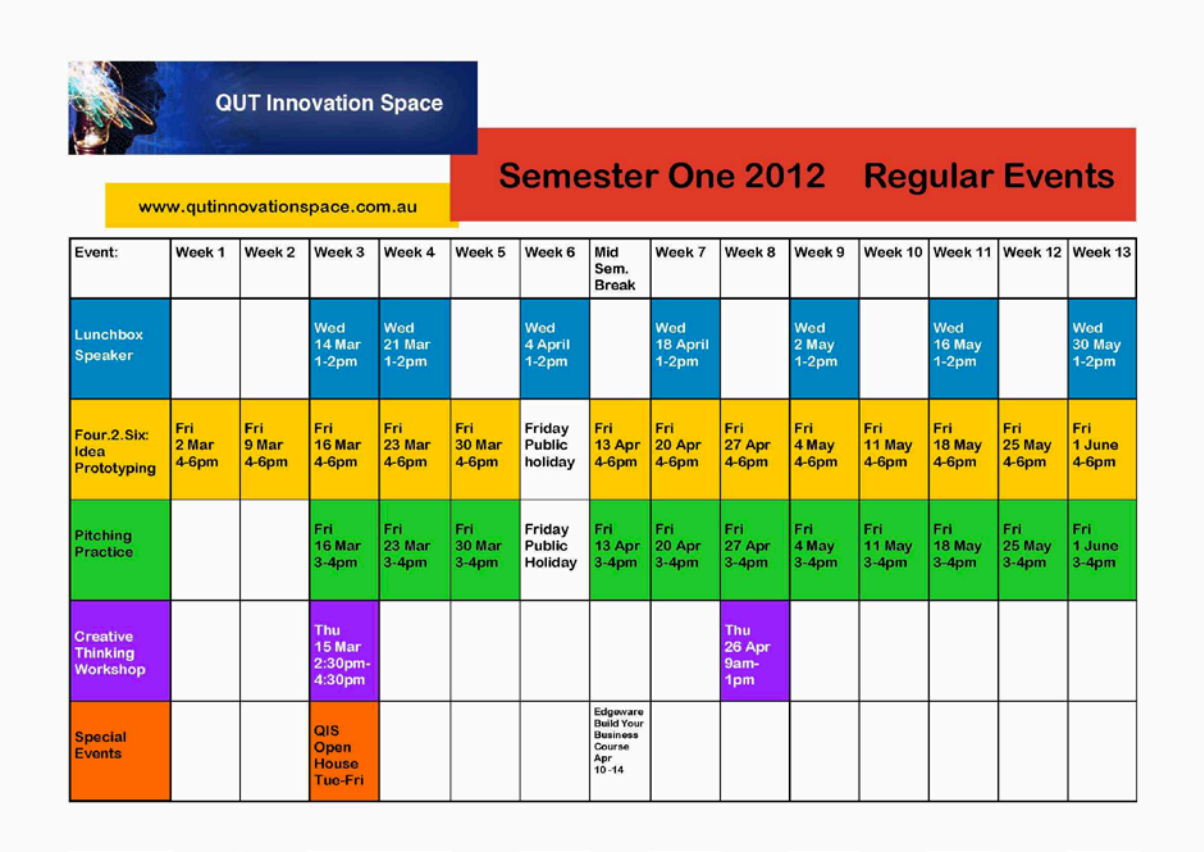
attended as a fortnightly or monthly schedule of seminars. The same was true for the Pitching Practice workshops, which had better, and more consistent attendance, when packaged as a four-week workshop series that repeated, rather than a weekly on-going event. Each semester's program brought considerable debate and reflection on the attendances across the previous semester.

Seminars and workshops were recorded and made available on the QIS web site for distribution.

QIS staff utilised a suite of free online tools to help in the efficient management and delivery of events. These tools included:

- Mailchimp.com - for the creation professional email promotions and the management of the QIS contact database,
- Eventbrite.com – for event bookings and tracking attendance, and
- Asana.com – for managing workflow and tasks across all staff.

Figure 5.1 – Working out scheduling so students were engaged was a constant challenge.



Event:	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Mid Sem. Break	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Lunchbox Speaker			Wed 14 Mar 1-2pm	Wed 21 Mar 1-2pm		Wed 4 April 1-2pm		Wed 18 April 1-2pm		Wed 2 May 1-2pm		Wed 16 May 1-2pm		Wed 30 May 1-2pm
Four.2.Six: Idea Prototyping	Fri 2 Mar 4-6pm	Fri 9 Mar 4-6pm	Fri 16 Mar 4-6pm	Fri 23 Mar 4-6pm	Fri 30 Mar 4-6pm	Friday Public holiday	Fri 13 Apr 4-6pm	Fri 20 Apr 4-6pm	Fri 27 Apr 4-6pm	Fri 4 May 4-6pm	Fri 11 May 4-6pm	Fri 18 May 4-6pm	Fri 25 May 4-6pm	Fri 1 June 4-6pm
Pitching Practice			Fri 16 Mar 3-4pm	Fri 23 Mar 3-4pm	Fri 30 Mar 3-4pm	Friday Public Holiday	Fri 13 Apr 3-4pm	Fri 20 Apr 3-4pm	Fri 27 Apr 3-4pm	Fri 4 May 3-4pm	Fri 11 May 3-4pm	Fri 18 May 3-4pm	Fri 25 May 3-4pm	Fri 1 June 3-4pm
Creative Thinking Workshop			Thu 15 Mar 2:30pm-4:30pm						Thu 26 Apr 9am-1pm					
Special Events			QIS Open House Tue-Fri				Edgeware Build Your Business Course Apr 10-14							

Activity: IDEAS & IP (Workshop)

Marketing Copy

This dynamic workshop pulls apart the IP relevant to early stage ideas and the delicate balance between too much and not enough IP protection around ideas.

The workshop will explore:

1. Protecting your little black book of ideas.
2. Non-disclosure and Confidentiality Agreements:
    a. Why and when to use them
    b. Why wouldn't someone sign it and when shouldn't I sign one?
3. Finding the balance between too much and too little secrecy.
4. Types of IP protection.
5. Choosing a strategy to fit your idea.
6. Where to get more info.

Registration is essential, limited places available.

Aim

To provide entrepreneurial students a brief overview of the IP system and what to consider when developing an IP strategy for early stage ideas. To provide practical insight into how and when to use non-disclosure and confidentiality agreements, and provide insight into why some people don't use them.

The Details

Frequency: Once a semester
Time: 1 – 1.5 hours duration
Booking required: yes
Max ppl: 20 *Min ppl:* 8
Target Audience: Students with early stage ideas and specific queries regarding IP. However, also open to students with a general interests in IP.
Delivery: Local IP law firm provided facilitator:
Cost to deliver: $25 - $50 (for speaker's gift). Venue provided by University. Facilitator volunteered their time (or was sponsored by their law firm to deliver).

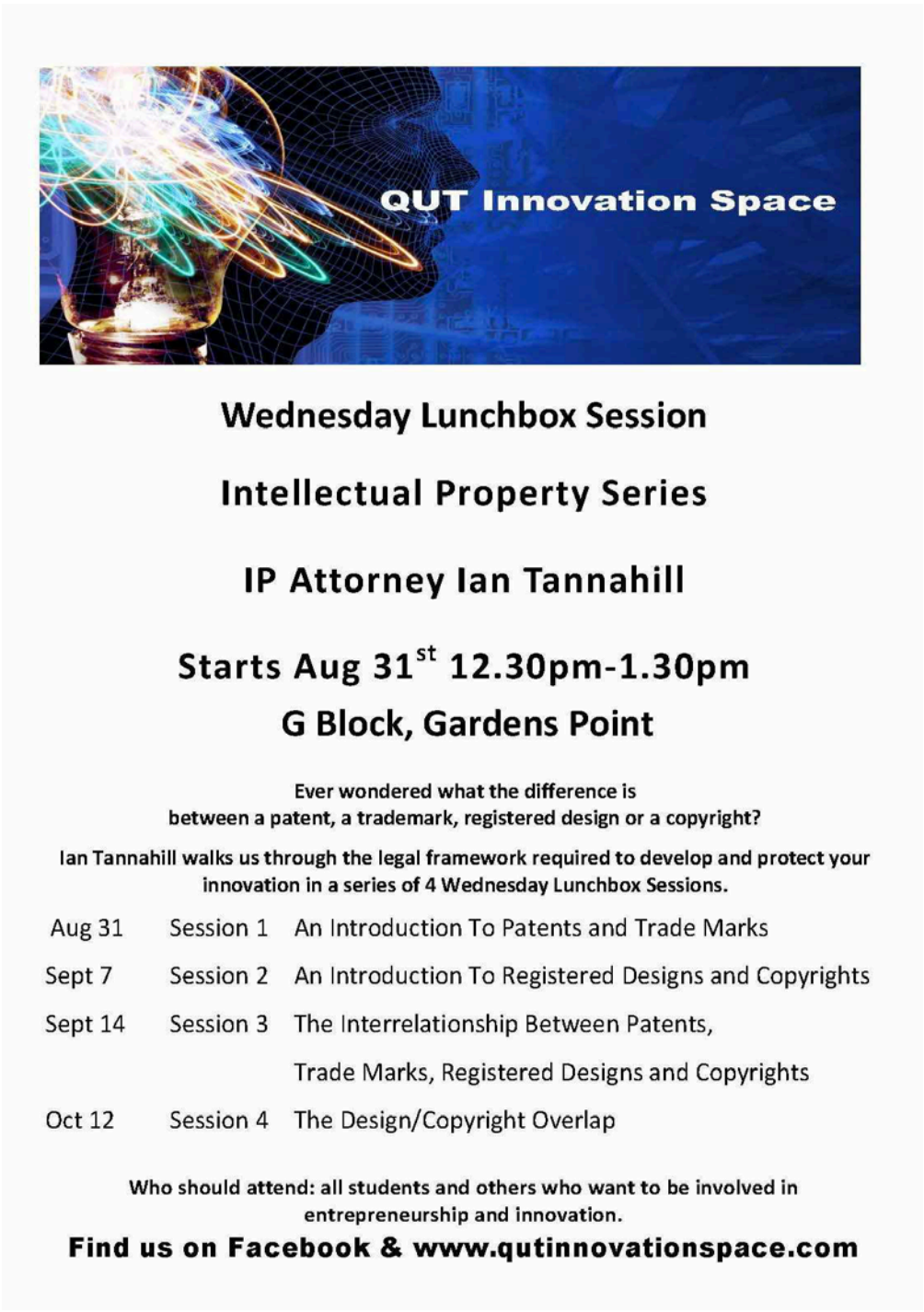
Reflection

One of the most common enquiries at the QIS was about IP issues and many students are confused as to how to protect an idea, how secretive they need to be, how to use an Non-Disclosure or Confidentiality Agreement, whether their technology or idea is protectable and what is the IP agreement of the university.

Workshops were always full and clearly they answered a real need of the students. The question and answer sessions at the end allowed students to explore some concepts around their ideas. What the students said they got out of the workshop

was a working basic knowledge of IP coupled with expert insight into a field that can be overwhelming for a novice.

At the end of the workshop, students could book a free appointment with an IP lawyer to discuss their own case in private (see below).



Activity: DESIGN THINKING (Workshop presented by Deloitte Digital)

Marketing Copy

This interactive workshop, hosted by one of the world's largest service firms, will explore Design Thinking and how it is used to innovate both internally and externally.

Participants will get a practical insight into the leading-edge thinking approaches used by Deloitte to remain competitive in an evolving market, and establish themselves as one of Australia's leading consulting firms.

Aim

Provide students with practical design tools and processes that can be used to develop their ideas. The workshop anchors students in the usability of their idea and the problem that it solves.

The Details

Frequency: Annually
Time: 1.5 hour duration
Booking required: yes
Max ppl: 60 *Min ppl:* 25
Target Audience: Any QUT student or staff interested in design thinking and/or any student interested in a potential career or graduate position with Deloitte.
Facilitator: Representatives from Deloitte (well supported by Deloitte with staff).
Costs to deliver: $25 - $30/per presenter (gift)

Reflection

The Deloitte Design Thinking team presented the popular seminar on Design Thinking, which serves as both an introduction to the thinking approach as well as a recruitment drive by Deloitte.

To Quote Deloitte on Design Thinking

Design Thinking is a way of thinking about problems. A mind-set that doesn't get flustered by ambiguity but finds inspiration within it. It is a process of diverging and converging, an ongoing quest for what's possible – discovering the best solution that challenges the status quo. Like 'systems thinking', Design Thinking takes a holistic approach to understanding the problem from multiple angles and personal perspectives. It's a belief system that, if you explore the shadows you'll uncover the underserved need, the unique opportunity.

Design Thinkers have a propensity to want to grapple with 'wicked problems' – issues so dense, messy and seemingly impossible that any reasonable, rational MBA would have the good sense to shy away.

Design Thinking is a creative 'human-centred' process of discovery. This process includes iterative cycles of prototyping, testing and refinement. It differs from analytical thinking in that, design thinking is characterised by the ability to combine empathy, creativity and rationality to meet users' needs. In particular, the process that brings Design Thinking to life takes participants through four phases, the first focuses on empathy through observation techniques such as ethnography, the second phase focuses on insight and idea generation through reframing the problem, for example according to a two by two matrix, the third phase focuses on the synthesis of ideas following a period of participant divergence and convergence. The aim of this third phase is to generate ideas to prototype, which will be selected and communicated in the fourth concrete phase.

<http://www.deloitte.com/view/en_AU/au/insights/browse-by-service/human-capital/c6c97efb517f9310VgnVCM3000003456f70aRCRD.htm>

Activity: STORY OF A START-UP (Guest speaker series)

Marketing Copy

Ever thought about turning an idea into a business? Come and hear the story from someone who's walked along the start-up path before you.

Open to all QUT students, staff and friends.

Aim

To provide students with exposure to real entrepreneurs and their stories of failure and success. Inspiration!

The Details

Frequency: Fortnightly – Monthly
Time: 1 hour duration (usually 1 pm – 2 pm)
*Booking required***:** no
Max ppl: 50 *Min ppl:* 10
Target Audience: Any QUT Student, staff or academic with an idea or interest in entrepreneurship and innovation.
Delivery: Industry speaker invited to present.
Cost to deliver: $25 - $30 (speakers gift)

Reflection

One of the most popular series of events held across the two years. Each seminar was used as an inspirational talk but also as a networking event. These events worked best when interactive as students felt more engaged as part of the entrepreneurial process rather than just having facts delivered to them. Questions were highly encouraged. Exposure to real entrepreneurs, both successful and struggling, was the most attractive component.

The QIS presented young entrepreneurs of successful, or almost successful, SMEs, passionate about their businesses; who still remembered the struggle to become successful. The QUT Business School runs a seminar series for entrepreneurs who have created national and even multinational corporations. Such seminars present stories and instil expectations beyond what 99%-plus of entrepreneurially inclined individuals will achieve over their lifetime (i.e., sustainable self-employment). It is the tails of action, uncertainty and hard work that need to be delivered.

Some presenters in the series include:

- Niall McCarthy, Zova <www.zova.com/homepage-new.aspx>
- Ben Johnston, JosephMark <www.josephmark.com.au>
- Jo Ucukalo, Handle My Complaint <handlemycomplaint.com.au>
- Toby Cumpstay, Simply for Strings <www.simplyforstrings.com.au>

- Michael Doneman, Edgeware <www.edgeware.com>
- Mike Boyd, Entrepreneur <mikeboyd.com.au>
- Dahlia Ishak, Rabbit Hole Ideation Café <www.ideationcafe.com>
- Jordan Lane, Llamadillo <www.llamadillo.com>
- Jessica Ed & Belinda Ho - Cocoon Industries <www.cocoonindustries.com>.

Routinely attended by 10 – 30 students, many not necessarily regulars, but the event worked better when numbers were at the top end of the scale. Consistency in numbers was the major problem; the event was more successful when run monthly or over a fortnightly schedule.

Story of a Start-Up

Presented by Jo Ucukalo from *Handle My Complaint*
(http://www.handlemycomplaint.com.au/)

Thurs, Aug 2, 2012 3pm - 6pm
QUT, GP - S12: OJW Room

Ever thought about turning an idea into a business? Come and listen to the story of someone who's been there before.

Resolving complaints might seem like a hard way to make a dollar, but *Handle My Complaint* is building a business out of disgruntled customers.

Event Program

3pm - 4pm - Idea Prototyping with QIS
4pm - 5pm - Guest Speaker *Handle My Complaint*
5pm - 6pm - Free Pizza
RSVP Here: http://www.facebook.com/events/247398775378783/

Activity: FOUR.2.SIX – IDEAS PROTOTYPING (Event)

Marketing Copy

A casual get together to prototype your ideas, get feedback, give feedback and meet like-minded individuals.

Aim

Provide a platform for students to test drive early ideas and get feedback. Foster the QUT entrepreneurial community through providing an avenue for entrepreneurial students to meet like-minded individuals.

The Details

Time: 4 pm – 6 pm, Friday afternoons
Min ppl: 5
Booking required: no
Target Audience: QUT's entrepreneurial students and staff.
Expenses: Nil

Reflection

This was an event trialled across the first year of the project. The aim was to get entrepreneurial students and staff sitting around a table talking about ideas, products and the possible. Students were encouraged to bring potential products to the workshop, the informal environment was supposed to act as an initial sounding-board and market research arena. Many of the QIS partners attended the evenings to provide support for speakers.

The event was not successful at the outset as students felt reluctant to speak out (uncomfortable about speaking, worried about IP, afraid of looking foolish, too few idea/products). This workshop approach did lead to the Pitching Practice workshops being developed to improve confidence (see below).

Other factors impinged on the success:

- Time & day - The event was originally designed to be a 'Friday Beers" type of wind-down before the weekend. This did not work, possibly because of work commitments. Other days of the week were much more successful.
- Facilitated vs freeform - the event started with facilitation by a QIS staff member. However, this often limited the flow of conversation, especially if the event had more than eight people. On the other hand, if left completely freeform the event quickly became dominated by the same characters each week.

The social element of this event evolved into Thirsty Thursdays. The prototyping element was very valuable for students but a structure is yet to be further developed.

Activity: PITCHING PRACTICE (Workshop Series)

Marketing Copy:

Join a fun and casual workshop that will develop your ability to quickly communicate your ideas to others.

These workshops incorporate a dynamic and practical mix of theatre sports, public speaking and practical tools for creating exciting pitches. Each week participants will explore and practice different aspects of building a pitch, including: breaking the ice, body language, structuring your idea and improvisation.

Aim

To develop higher-level practical skills for public speaking, presenting and pitching.

The Details

Frequency: Weekly
Time: 1 – 1.5 hours duration
Booking required: no
Max ppl: 10 (per facilitator) *Min ppl:* 8
Target Audience: Any student or staff.
Delivery: QIS facilitator and other trained student facilitators.
Cost to deliver: Nil.

Content:

The Pitching Practice Workshops underwent considerable evolution from the start of the project until the end. See Appendix E for lesson plans for the workshop series.

Reflection

Pitching Practice was most effective as a weekly practical workshop. Substantial improvement in pitching (or public speaking) skills observed with all students over time. Originally run as a drop in session, the workshops became very repetitive and new students mixing in with students more advanced created management difficulties for the facilitator. To counter these issues, Pitching Practice became a series of four workshops that took novices from the basics of public speaking to delivering short, polished speeches that highlighted specific points. This four week series was then repeated throughout the semester. The change realised several improvements in quality of the workshops: repetition was removed, there was consistent attendance from week to week as students could commit to four weeks of activity, while the drop in sessions had less value as they could attend next week and

not miss anything, and the facilitator could better manage workshop preparations and the transition from novice to polished speaker.

Activity: PITCHING COMPETITION (Event)

Marketing Copy

See example (right).

Aim

To *further* develop higher-level practical skills for public speaking, presenting and pitching.

The Details

Frequency: Annually or biannually
Time: 2 hours duration
Booking required: no
Max ppl: final 5
Target Audience: QIS pitching workshop attendees and others
Delivery: QIS facilitator
Cost to deliver: Partner organisation: prize $500; QIS $300 (lunches)

Content

This exercise was an extension of the Pitching Practice Workshops where selected workshop presenters would pitch to an industry audience during a lunch. In this instance, qualifying rounds of presentations would be undertaken at the QIS before a final five presenters would be chosen to pitch to an audience of Rotarians, mostly high level business peoples, in the Brisbane headquarters of the club. After each pitch, there would be a question and answer session.

Reflection

The event was successful and well received by the Rotarians and the QIS entrants alike. Although the event gave students an opportunity to connect with successful and highly networked Rotarians, the Rotary club, while they enjoyed the event, assumed the competition was similar to a high-school public speaking competition and did not realise these students were attempting to launch their own business. As a consequence of this, participants were not engaged as emerging entrepreneurs but rather as 'good' students with initiative. The mentoring and industry connections we hoped would be created between the students and the Rotary Club were not. The exercise was supplanted as partnerships came together to implement the Brisbane Start Up Night (see below).

Activity: STUDENT START-UP NIGHT (Partnered Event)

Marketing Copy

Got an idea that could make a great business?
A Uni assignment that has commercial application?
Thinking about creating a start-up?
Working on a start-up at the moment?

Join us for the Student Start Up Night at the Microsoft Innovation Centre.

The QUT Innovation Space, River City Labs & the Microsoft Innovation Centre have combined forces to put on an interactive night for student start-ups, existing or yet to be created. With networking, pizza, and a pitching competition, it's a night not to be missed.

The winners of the pitching competition will take home an Xbox Kinect Package, 3 months desk space at River City Labs and start-up coaching sessions to give their idea a kick-start.

To win, simply convince the judging panel in 2 minutes or less, that your idea, and the team behind it, has what it takes.

Register to Pitch Here: http://qutinnovationspace.com/?page_id=1139
Pitching Competition Registration Deadline: 05/10/2012

See you at 5pm at the Microsoft Innovation Centre (level 18, 400 George St).

Aim

To bring together the wider Brisbane student start-up and student entrepreneur community. To provide access to the networks, organizations and programs available in Brisbane for entrepreneurs.

The Details

Frequency: Once per semester
Time: 2 hours (5 – 7 pm plus drinks)
Booking required: Registration required if pitching. RSVP required if attending.
Max ppl: 100 *Min ppl:* n/a *# Teams pitching in final:* 5
Target Audience: All Brisbane University students interested in start-ups and entrepreneurship.
Delivery: QIS staff and partner organisations: Microsoft Innovation Centre (MIC), River City Labs (RCL), iLab, University of Southern Queensland, QUT's Creative Enterprise Australia.
Cost to deliver:

- Prizes provided by RCL & MIC.
- Pizza and soft drink provided by MIC

- Venue provided by MIC
- Speakers gifts provided by MIC
- Advertising, promotion, event management and competition logistics managed by QIS.

Reflection

This event was both a competition and a networking event that provided an opportunity to access information and connect with entrepreneurial programs of support systems in Brisbane and external to QUT. The evening started and ended with networking. A small break out allowed further networking while the pitching competition was judged. A series of prizes was donated by partner organisations to the winner and the next two runners-up. The pitching competition itself often served as the first exposure of students to pitching to venture capitalists, commercialisation firms and incubators (the judges).

Student teams from two universities (QUT and The University of Queensland) entered in the pitching competition. Attendees were drawn from across the greater Brisbane region and included government agencies, private firms and individuals from the innovation and commercialisation infrastructure, and staff from four regional universities (QUT, The University of Queensland, Griffith University and University of Southern Queensland).

Selecting the pitches to present must be well managed and planned. If not, it can become administratively demanding or may turn people off applying. The QIS staff adopted the following process:

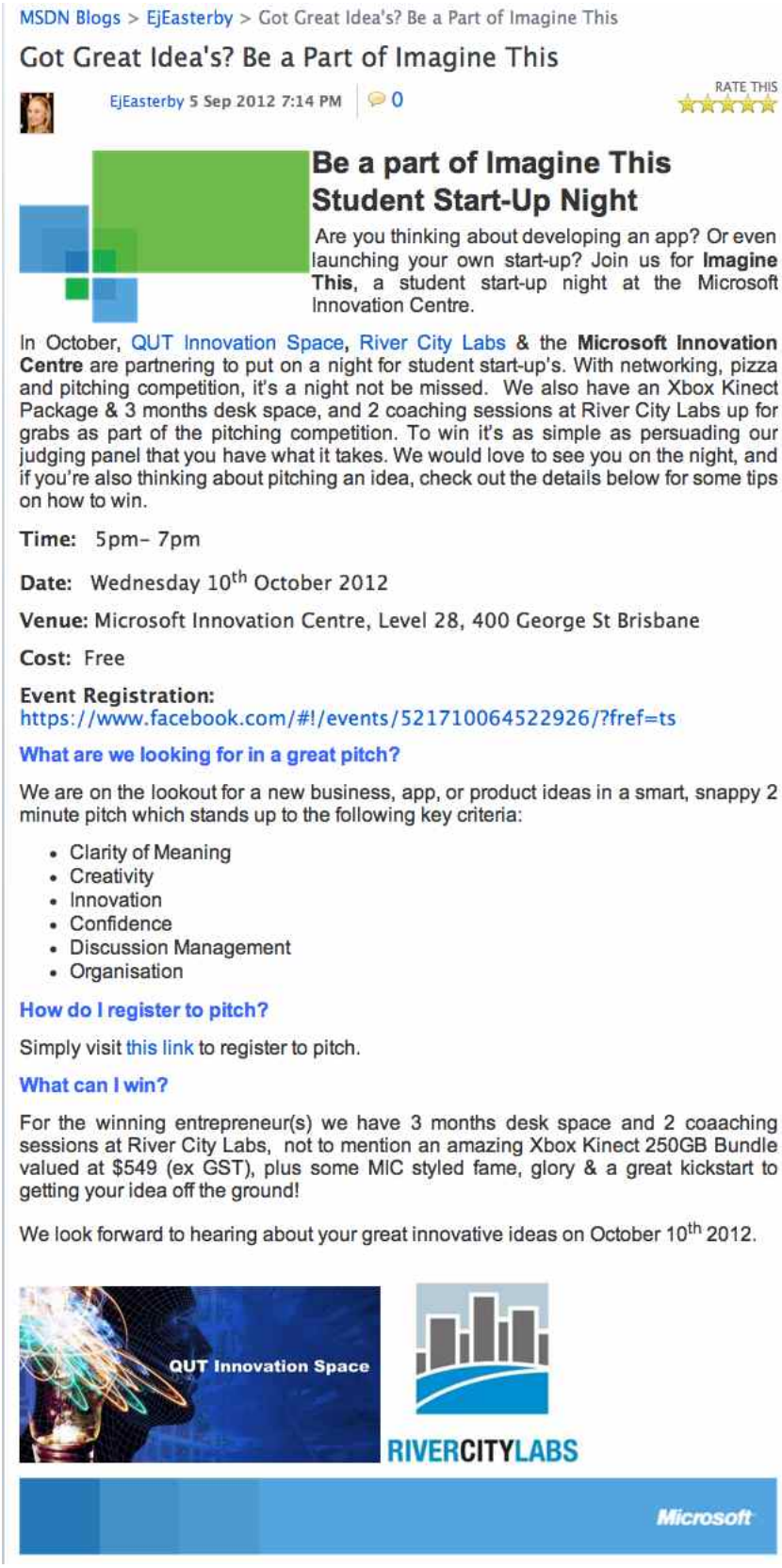
- Students submitted an application on line. The application contained no more than 10 questions that address the key factors of their idea, technology or start-up.
    1. Is this a totally new idea with no action yet, or have you started working on this start-up?
    2. Start-up name?
    3. Who are the founders?
    4. What is the best e-mail to contact you?
    5. What is the best number to contact you?
    6. Please describe your business in 140 characters or less.
    7. What problem are you solving?
    8. Who are your customers, clients or users?
    9. Why are you passionate about this start-up or idea?
    10. Do you already have any customers or revenue? (Obviously not relevant to ideas.)
- The best 10 – 20 online submissions were selected to enter a pre-round of pitching held an hour before the main event at the venue location. Those that

make it to the pre-round pitch their 2 min talk to a team of student judges. They are given a score out of 5. There is no question time in this round. Hosting the pre-round prior to the main event also ensures that the student entrepreneurs attend the entire event regardless of making it to the top 10 or not.

- The top 10 pitches go one to the main round and pitch to the industry judging panel and the event attendees. The pitch is followed by questions and comments from the judges.

The event received good feedback that attendees enjoyed meeting similarly inclined students from other universities. Stronger collaboration between universities would make the event much stronger.

Source: <http://blogs.msdn.com/b/ejeasterby/archive/2012/09/06/got-great-idea-s-be-a-part-of-imagine-this.aspx>



MSDN Blogs > EjEasterby > Got Great Idea's? Be a Part of Imagine This

Got Great Idea's? Be a Part of Imagine This

EjEasterby 5 Sep 2012 7:14 PM 0 RATE THIS

Be a part of Imagine This Student Start-Up Night

Are you thinking about developing an app? Or even launching your own start-up? Join us for **Imagine This**, a student start-up night at the Microsoft Innovation Centre.

In October, QUT Innovation Space, River City Labs & the **Microsoft Innovation Centre** are partnering to put on a night for student start-up's. With networking, pizza and pitching competition, it's a night not be missed. We also have an Xbox Kinect Package & 3 months desk space, and 2 coaching sessions at River City Labs up for grabs as part of the pitching competition. To win it's as simple as persuading our judging panel that you have what it takes. We would love to see you on the night, and if you're also thinking about pitching an idea, check out the details below for some tips on how to win.

Time: 5pm- 7pm

Date: Wednesday 10th October 2012

Venue: Microsoft Innovation Centre, Level 28, 400 George St Brisbane

Cost: Free

Event Registration:
https://www.facebook.com/#!/events/521710064522926/?fref=ts

What are we looking for in a great pitch?

We are on the lookout for a new business, app, or product ideas in a smart, snappy 2 minute pitch which stands up to the following key criteria:

- Clarity of Meaning
- Creativity
- Innovation
- Confidence
- Discussion Management
- Organisation

How do I register to pitch?

Simply visit this link to register to pitch.

What can I win?

For the winning entrepreneur(s) we have 3 months desk space and 2 coaaching sessions at River City Labs, not to mention an amazing Xbox Kinect 250GB Bundle valued at $549 (ex GST), plus some MIC styled fame, glory & a great kickstart to getting your idea off the ground!

We look forward to hearing about your great innovative ideas on October 10th 2012.

Activity: THIRSTY THURSDAY (Event)

Marketing Copy

A social networking event for the Brisbane community of student entrepreneurs and change makers.

Interested in entrepreneurship, innovation and ideas? Drop into the QIS this Thursday to see ways you can get involved and what resources are available to help you progress your idea to the next stage.

Aim

To bring the university entrepreneurial community together in one place at one time. To foster a connected community, have fun and provide an entry point for new students to have an introduction to QIS.

The Details

Frequency: Monthly (Thursday)
Time: 2 hours duration (4 – 6 pm)
Booking required: no
Max ppl: n/a *Min ppl:* n/a
Target Audience: The QIS community, including partners, mentors and speakers, and any student working on a business start-up or idea.
Delivery: QIS staff.
Cost to deliver: $60 to cover finger food and soft drink. Attendees were encouraged to bring their own alcohol.

Reflection

This event grew out of the Idea Prototyping workshop (see below). While the Idea Prototyping workshops were meant as informal talk-feasts, the focus led to perceptions of a more formal atmosphere. It was decided to aim for an informal approach, where networking could be facilitated more comfortably.

As a networking event, the Thirsty Thursday events became a cross-disciplinary melting pot where like-minded individuals from all faculties within the university ended up sharing knowledge, resources, skills, feedback and insight. New connections were made, new ideas often were discussed at length and new student business partnerships were formed. Feedback reflected the excitement around meeting like-minded people.

To be successful these events had to be driven by the QIS staff. Successful ex-QUT graduate entrepreneurs attended. QIS staff actively engaged with the students, got them talking and introduced them to each other and to entrepreneur graduates, and facilitated the opening conversations. Student regulars of the QIS were used as ambassadors to facilitate the engagement of newcomers in the networking process.

Activity: IDEAS NEED LOVIN' TOO (Event)

Marketing Copy

Ever thought your idea or design would make a great business?

The QUT Innovation Space (QIS) teams up with The DUB, to bring together an inspiring event for anyone who's ever considered turning an idea into something more.

Come enjoy some wintery pumpkin soup and hear leading design firm JosephMark talk about the creation of Made In The Now, speak to the QUT Innovation Space about starting a business at university or just check out the QIS T-shirt Design Challenge and student design exhibition.

All QUT student, staff and friends welcome.

EVER THOUGHT YOUR IDEA OR DESIGN WOULD MAKE A GOOD BUSINESS?

THE QUT INNOVATION SPACE (QIS) TEAMS UP WITH THE DUB, TO BRING TOGETHER AN INSPIRING EVENT FOR ANYONE WHO'S EVER CONSIDERED TURNING AN IDEA INTO SOMETHING MORE.

COME AND ENJOY SOME HOT, WINTERY SOUP AND HEAR LEADING DESIGN FIRM JOSEPHMARK TALK ABOUT THE CREATION OF MADE IN THE NOW, SPEAK TO THE QUT INNOVATION SPACE ABOUT STARTING A BUSINESS AT UNIVERSITY OR JUST CHECK OUT THE QIS T-SHIRT DESIGN CHALLENGE AND STUDENT DESIGN EXHIBITION.

ALL QUT STUDENTS, STAFF AND FRIENDS WELCOME.

VISIT US : WWW.FACEBOOK.COM/IDEASNEEDLOVINTOO

4:00PM	SOUP KITCHEN, FLEET STORE & DESIGN MARKET OPEN
4:45 - 5:00	STARTING A BUSINESS @ UNIVERSITY (QUT INNOVATION SPACE)
5:00 - 5:30	JOSEPHMARK PRESENTS THE STORY OF MADE IN THE NOW
6:00PM	QIS T-SHIRT DESIGN CHALLENGE - WINNERS ANNOUNCED
6:00 - 8:00	SOUP KITCHEN, FLEET STORE & DESIGN MARKET CLOSE

Aim

To create a cross-faculty networking event pivoted around the Design School.

The Details

Frequency: Annually
Time: 4 pm – 8 pm
Max ppl: 150 *Min ppl:* 20
Booking required: no
Target Audience: Design & Creative Industries students
Delivery: The Dub, Made In The Now, Josephmark.
Expenses:

- Alcohol (The DUB) – students bought beers and soft drinks.
- Liquor licence (QIS) – in conjunction with the QUT Student Guild.
- Soup and bread (QIS) – attendees bought large cups of soup and rolls.
- Security Guards (QIS)

Reflection

The ‘Ideas Need Lovin’ Too’ was an ambitious attempt at a larger-scale event targeting a broad audience across QUT, with particular emphasis on students from the QUT School of Design and the Creative Industries Faculty. Students of these disciplines are more likely to be self-employed and entrepreneurially inclined. Entrepreneurs from Josephmark, a local design firm recognised internationally, presented their start-up story and current innovation processes. The networking event also included a T-shirt design competition. As the event spanned four hours across the evening, culminating in announcing the winners of the T-shirt design competition, it was decided to make the event catered.

Overall, the event turned out to be very popular and attracted 60 participants; including many students new to QIS activities. The combined food/bar and networking with a fun element made the event quite attractive to the general student cohort.

With this event QIS partnered with a student guild group The DUB with the aim of attracting a new audience (Design and Creative Industries). It was hoped that QIS would help with the resources and organising, and the DUB would provide support with promotion to an audience that had not previously been successfully reached.

Although initially this collaboration began well, as things evolved, assignment deadlines and university responsibilities influenced the available time and dedication of the student group. Furthermore, as the event rolled on it became apparent that the agendas of the collaborating groups were not completely synchronised. For example,

QIS T-SHIRT DESIGN CHALLENGE
AUGUST 17TH-22ND

(SPONSORED AND INSPIRED BY MADE IN THE NOW)

IN COLLABORATION WITH MADE IN THE NOW, QIS HOSTS THIS T-SHIRT DESIGN CHALLENGE THAT FUSES THE WORLDS OF DESIGN AND CURRENT AFFAIRS.

THE NAME OF THE GAME: CREATE A T-SHIRT DESIGN IN 9 HOURS IN RESPONSE TO A BREAKING NEWS STORY CHOSEN BY THE PUBLIC.

PRIZES: FREE TIX TO ANALOGUE/DIGITAL CONFERENCE, MITN T-SHIRT VOUCHER, GRILLED VOUCHER + OTHER PRIZES.

WHO CAN ENTER: ANY QUT STUDENT OF STAFF FROM ANY FACULTY.

HOW IT WORKS: REGISTER ONLINE @ WWW.QUTINNOVATIONSPACE.COM

CHALLENGE STARTS & BREAKING NEWS STORY ANNOUNCED - FRI AUG 17
5 DAYS TO CREATE A DESIGN
SUBMISSIONS CLOSE @5PM - WED AUG 22

WINNER ANNOUNCED @ IDEAS NEED LOVIN' TOO - THURS AUG 23

WHERE TO SUBMIT MY DESIGN: EMAIL A4 PRINTABLE PDF TO MITN@QUTINNOVATIONSPACE.COM OR DELIVER YOUR A4 DESIGN TO THE QUT INNOVATION SPACE AT GP - G211.

The DUB originally planned to have a market of student design products at the event, however this did not eventuate. Multiple organising groups saw last minute changes to the program affected, such as promoting other events, during the guest speaker timeslots.

The introduction of food and alcohol increased the logistics of managing and implementing the event by an order of magnitude, both in the lead up to the event, in hosting the event, along with the need for security, and in the final clean up.

While the event was relatively successful, and was received well by the participants, when considered in context of the input and resources required to host it, other types of campaigns could have been more effective in reaching the target audience.

Activity: CODESMASH (Student-hosted event)

Marketing Copy

codeSMASH Programming Event

What is it?

codeSMASH is a fun event for developers to come together and build innovative products, solve programming challenges and code new solutions to existing problems.

No matter what your skill level is, any and all developers and programming enthusiasts will enjoy this opportunity to learn and code with new ideas in creative ways.

Whether you want to show off your skills, learn something new, add to your portfolio, create new products or just have fun with other programmers, CodeSMASH is the place to be.

Plus, FREE PIZZA will be provided to all attendees!

When is it?

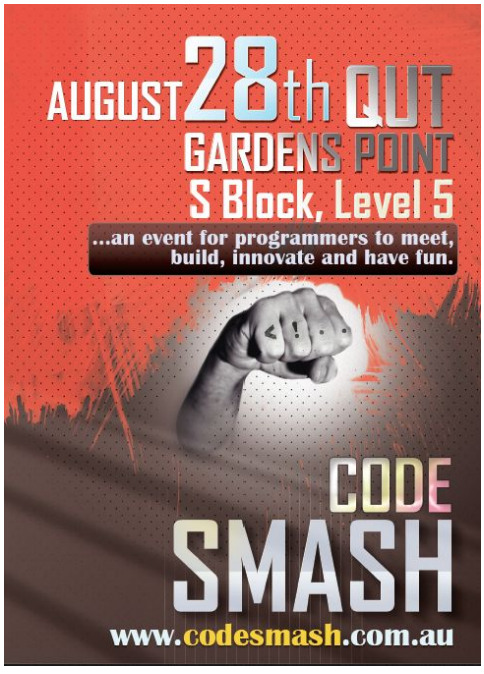
It starts at 1 pm on the 28th of August (Sunday).

Where is it?

It will be held at QUT in S-block, level 5.

More Information:

To find out more about codeSMASH and to RSVP, go to www.codesmash.com.au.



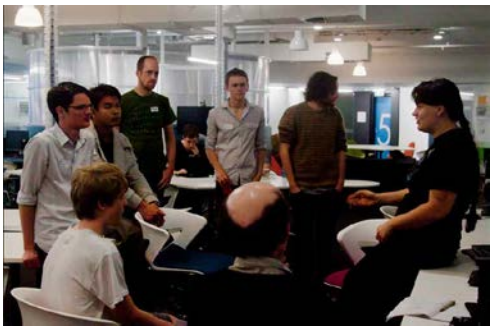
A casual get together to prototype your ideas, get feedback, give feedback and meet like-minded individuals.

Aim

Provide a platform for programmers and IT developers to co-work and address 'wicked problems'. Encourage networking amongst programmers – from QUT and elsewhere.

From the QIS perspective, to engage students in hosting activities sponsored by the QIS.

The Details

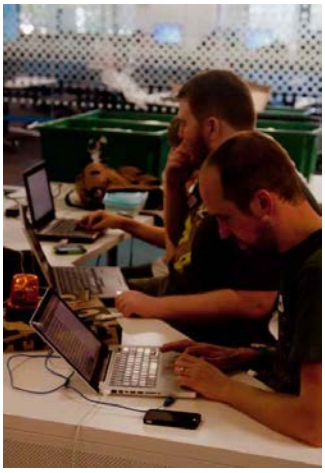


Frequency: Once, twice annually.
Time: 1 pm – 10 pm Sunday
Min ppl: 50
Booking required: yes
Target Audience: programmers and IT developers, in this instance from the southeast Queensland region as the event works best with larger numbers.
Expenses: Free pizza & soft drink for 50 ($300)

Reflection

The event is derived from similar events held in various institutes around the world; this particular example is taken from Stanford University's SVI HackSpace <svihackspace.com>.

Similar events are extremely popular and attract substantial interest. The QIS event attracted 53 attendees from as far south as the Gold Coast and north from the Sunshine Coast. Attendees were students from the three major Brisbane-based universities, IT consultants and businesses. Other hacking groups also attended (e.g., Girl Geeks) and collaborations continued with the QIS around QUT students involved in the hacking space.



The QIS reserved an entire floor of a building that is outfitted as a student computer zone and co-working space. QIS support staff arranged and manned the reservation desk, delivered pizzas, stocked the drinks and cleaned up.

The event has to be well planned and delivered, with the facilitator and support staff moving activities along to a tight timeline (see below for event timelines). Attendees should bring their own laptops and most prefer to do so.

Feedback was extremely positive; attendees remained engaged for the full 9 hours, although some did report fatigue. The discussions were intense.

Some feedback suggestions were collected at the end of the event and these centred on three aspects:

- Ideas about projects could have been collected and distributed prior to the event. This would have had a number of positive consequences including allowing people to think about projects ahead of time, facilitating rapid group formation and for programming to advance beyond a preliminary stage.
- The event could have been split over two days, in one weekend or on two Sundays, to maintain momentum and avoid fatigue.
- As an ongoing series, it was suggested that rotating the hacking event between tertiary institutes would help make the event sustainable. However, after the QIS event, attempts to repeat codeSMASH at other institutes fell through.

codeSmash event plan

By **Robert Roose**

So you may be wondering what our first codeSmash event will be like, and how things will work on the day. Following is a little more information about how everything will run.

Essentially, codeSmash is providing the space and opportunity to allow great things to happen. There are no expectations, no limitations, but endless possibilities. You can come build, innovate, meet with and collaborate with talented software enthusiasts from all around southeast Queensland.

Our aim is to make southeast Queensland a more entrepreneurial and innovative hub for development in Australia by bringing together like-minded people in a social, casual, collaborative environment. codeSmash provides a seed for companies to be formed and innovation to spur.

The event will have as few rules as possible, and will be run in a fairly casual and improvisational manner. Our overall schedule is as follows:

1:00pm – Arrive
When you arrive you can check in, put on a nametag and immediately get to work, or chill with other cool like-minded people.

1:10pm – Introduce codeSmash
After the initial crowd has settled we'll be going over how the codeSmash event will work, introduce our sponsors, and get everyone pumped for the main event.

1:30pm – Mixer
One of the most valuable aspects of codeSmash is meeting like-minded and interesting people. Everyone will have 15 seconds to introduce who they are, what their skills are and what they're interested in doing. We'll also allow people to collaborate on project ideas, and then start forming teams so that everyone can start developing on awesome ideas.

2:00pm – Begin programming
Although you can start working at anytime, we'll be aiming for everyone to start development by 2:00pm so they have enough time to get something completed.

6:00pm – Dinner is served
We'll be providing free pizza to all attendees, and this will provide another chance for people to network and talk with other interesting people.

7:00pm – Finalise projects
After dinner everyone can go back to developing and begin wrapping up their projects ready for completion.

9:00pm – Begin presentations
Although not mandatory, everyone will be provided the opportunity to present what they've worked on during the allotted time, and receive valuable feedback from other talented professionals.

So that's the basic rundown of how things will happen. The most important thing is for everyone to have fun! If you have any more questions, please don't hesitate to ask.

Our space will be open from 1pm-9pm, so feel free to come along and check it out just to satisfy your curiosity. If you're interested in software, technology, business, entrepreneurship, or just generally like cool things, then it's definitely worth coming along.

Activity: QIS OPEN HOUSE (Event)

Marketing Copy

All QUT student, staff and friends welcome. Marketing copy took various forms as outlined below depending on the format of the event.

Aim

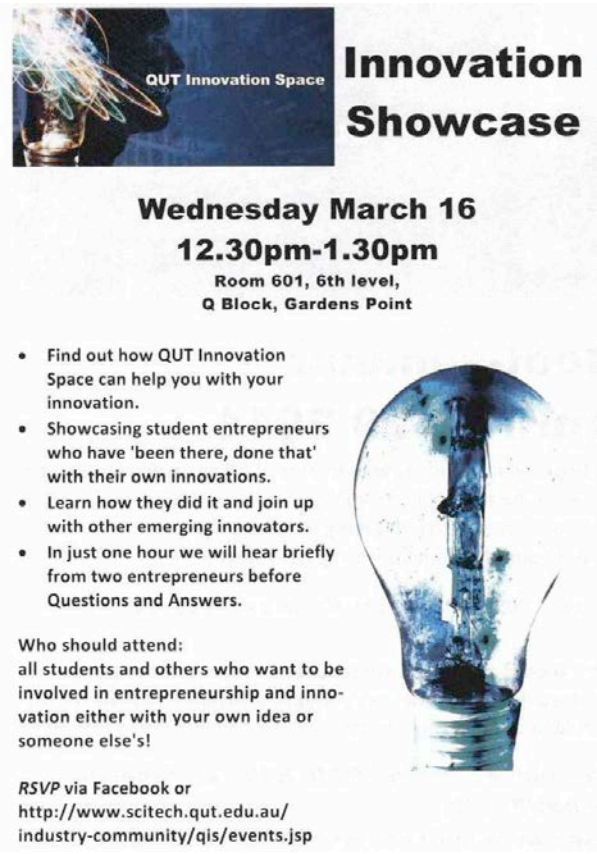
To raise awareness of innovation and entrepreneurship across QUT.

The Details

Frequency: Once per semester during first week
Time: 10 am – 4 pm
Max ppl: N/A *Min ppl:* 20
Booking required: no
Target Audience: Entrepreneurially inclined students and staff
Delivery: QIS and partners
Expenses:

- Coffee, tea, biscuits ($20)
- Gifts to speakers ($50)

Reflection



This event began life as an Innovation Showcase (left) where one-hour seminars would feature examples of creativity, innovation and entrepreneurialism from across QUT with student entrepreneurs presenting their efforts as start-up companies. The interest was high and feedback centred on wanting to know where the next steps could be made. Once a dedicated space was made available to the QIS, the event was transformed into the QIS Open House day held during the first weeks of semester. The event featured a rolling series of workshops and seminars that highlighted the QIS activities as well as providing inspirational materials for would-be entrepreneurs (programs shown on next two pages).

OPEN HOUSE LUNCHBOX SESSIONS

When: Week 1 – Tues 26, Wed 27, Thurs 28 & Fri 29 of July: 12.30 – 1.30
Where: QUT Innovation Space, Gardens Point, G309

Bring Your Lunch!!

Tues July 26
12.30 – 1.30

Cleantech at QUT
(Graeme Millar)

Prof. Graeme Millar is accelerating Cleantech innovation at QUT by promoting a new business model based upon close cooperation with industry, research institutes and government.

Wed July 27
12.30 – 1.30

Edgeware: Entrepreneurs are Weird
(Michael Doneman)

In our experience, the person who becomes an entrepreneur often shares the mindset of artists, inventors, activists and criminals. This kind of weirdness is uncommon and in can be the source of innovation or disruption, or both.

Thurs July 28
12.30 – 1.30

Edgeware Indigenous:
(Robert Barton)

because of their impracticality, utility and social cohesion, the traditions and systems if Indigenous Australians have much to teach those who aspire to meaningful and socially responsible enterprise.

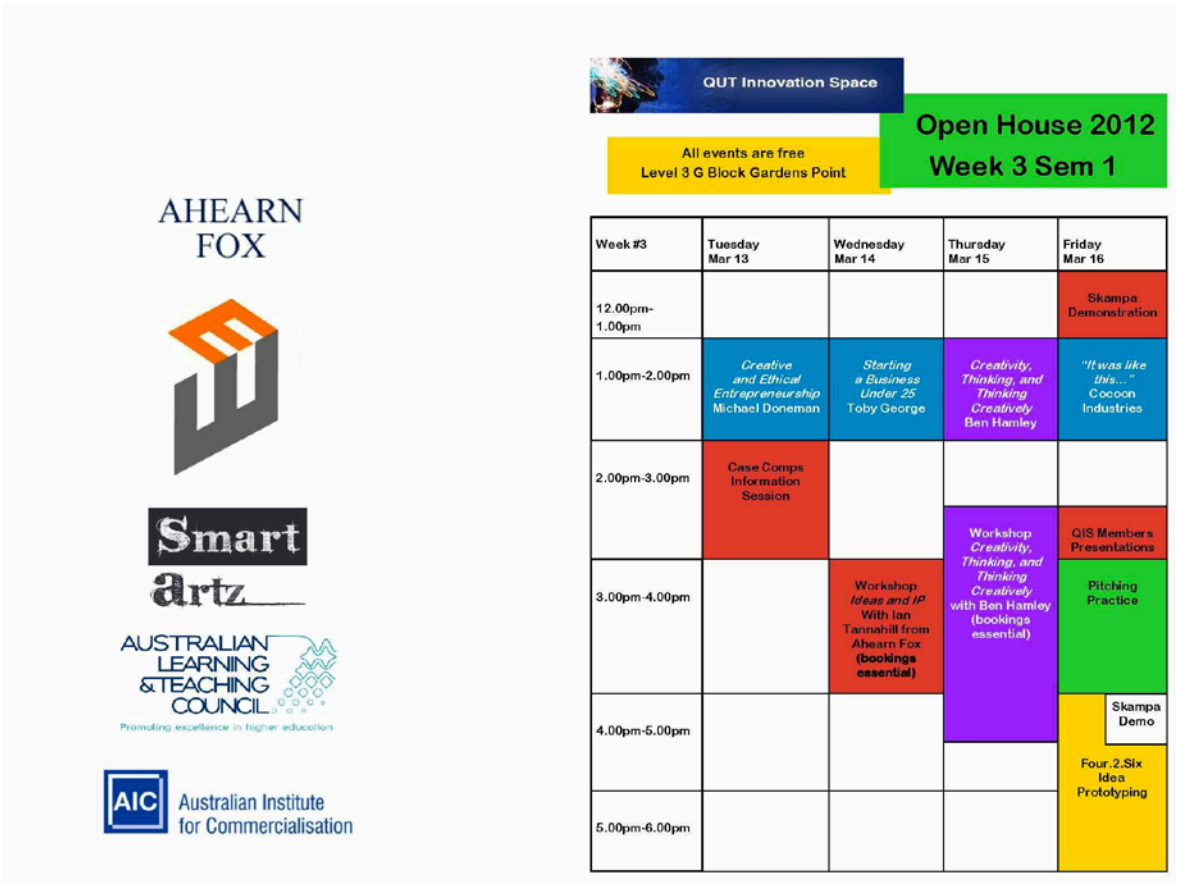
Fri July 29
12.30 – 1.30

Edgeware:
(Michael Doneman)

Universities can provide a useful environment for generating, nurturing and building a business, or building entrepreneurial skills for application in the workplace.

EDGEWARE
CREATIVE ENTREPRENEURSHIP

www.qutinnovationspace.com.au, Facebook: QUT Innovation Space. Twitter: QUTInnovationSpace, www.edgeware.com



Open House Programme

All events are free Level 3 G Block Gardens Point

Activity	Description	When
Skampa Demonstrations	The Skampa development system invites kids to play and learn by using a giant video touch screen on the floor—it's like a huge iPad! This commercialisation project by qutbluebox brings a new physical dimension to learning. A group of kids, on their own or with direction by a teacher, interact with a cartoon world that responds to their every stamp, step, and slap. The games teach numeracy, shape recognition, cooperation, physical coordination, and more.	**Fri Mar 16 12.00pm-1.00pm** **Fri Mar 16 4.00pm-5.00pm**
Creative and Ethical Entrepreneurship **with Michael Doneman of Edgeware**	Edgeware is an education and support system for ethical entrepreneurs and managers. We think that business is fun, and believe that socially responsible entrepreneurship can change the world. We offer practical, highly flexible courses and workshops with successful entrepreneurs and business people, supported by specialist trainers.	**Tue Mar 13 1.00pm-2.00pm**
Starting a Business Under 25 **with Toby George**	Toby describes himself as a business owner, musician, innovator, traveler, lover of style, design and music and started his first business six years ago at the age of 20. He is now the co-founder of Simply for Strings, one of Australia's leading stringed instrument retailers. Toby will share his experiences and the knowledge learnt from starting a business in his early twenties and why, after seven years of successful trading, he has been inspired to continue his studies in Business/IT at QUT.	**Wed Mar 14 1.00pm-2.00pm**
Ideas and IP **With Ian Tannahill from Ahearn Fox (bookings essential qis@qut.edu.au)**	If you have an idea and you aren't sure if you should share it or keep it tightly sealed in the vault, then this is a must-do workshop. Protecting your Intellectual Property at the outset can be essential and sometimes, so is sharing it. Be informed about how to protect and how to share your ideas, and choose the right strategy to move forward with your idea or technology.	**Wed Mar 14 3.00pm-4.00pm**

Activity	Description	When
Presentation & Workshop *Creativity, Thinking, and Thinking Creatively* with Ben Hamley from Smart Artz	Ben's current work involves developing learning programmes for thinking; brain-controlled interactive artworks; and a touch of behavioral economics. In his presentation, Ben will explore some popular misconceptions about creativity and unpack some thought experiments to explain how our mind creates ideas, and the cognitive traps that restrain our creative potential. The following workshop will explore the Smart Artz approach to problem solving and thinking creatively. Through the two hour session participants will practically explore the concepts introduced in the earlier presentation.	**Thurs Mar 15 Presentation: 1.00pm Workshop: 2.30pm (bookings essential, qis@qut.edu.au BYO pen & paper)**
"It was like this..." **with Cocoon Industries founders: Jess Ede, Belinda Ho & Tahnee Lambrechsten**	Cocoon Industries plays in the fields of interactive media, brand development and web design. The company was founded by three communication design students in their last semester at QUT. They describe themselves as having big plans and high expectations for their city and themselves and they will share with us some of the stories and insights they have gained since taking the leap as a start-up business two years ago.	**Fri Mar 16 1.00pm-2.00pm**
QIS Members Presentations	A selection of QIS members will talk about their current projects and share their experience of founding, forming and sometimes failing in a start-up business. If you have an idea for a business, technology or innovation, and aren't sure how to get it off the ground, come have a chat with people currently working on their own projects.	**Fri Mar 16 2.30pm-3.00pm**
Pitching Practice Hosted by Tim Sheehan	Practice pitching your idea, business or technology or polish up your stage presence and persuasive skills with a theme selected by the host.	**Fri Mar 16 3.00pm-4.00pm**
Four.2.Six Idea Prototyping	A casual get together to prototype your ideas or generally wind down before the weekend. Hosted by QIS members, participants bounce ideas around this collaborative group, get feedback, give feedback and meet like-minded people.	**Fri Mar 16 4.00pm-6.00pm**

Activity: INNOVATION BOOT SEMINAR (Event)

Marketing Copy

See figure (right) as example.

Aim

To present the basics of building businesses in 1.5 days. To provide inspiration to entrepreneurially-inclined students.

The Details

Frequency: Annually
Time: Two days
Max ppl: 120 *Min ppl:* 20
Booking required: yes
Target Audience: Entrepreneurially inclined students from across QUT.
Delivery: QIS partners.
Expenses:

- Catered lunches and morning teas ($300 plus)
- Gifts for speakers and parking costs

Reflection

The event was held in the Easter break and initial registrations for the event topped 130 with 60 of these providing RSVPs to follow up e-mails. On the day, 24 attendees turned up. Significantly, all 24 attendees stayed for the entire two-day event and the final Open Forum, with feedback on the event and discussion regarding QIS directions, went until 4 pm (entrepreneurs like to network).

Attendees came from across QUT faculties. One attendee came from The University of Queensland; his brother in Malaysia found our web site advert.

This two-day event morphed into the five-day build your own business course delivered by Edgeware (see below). In retrospect, the two-day version probably should have been retained as an independent event, held no more than twice a year. The two-day event presents more as an awareness-raising exercise where short, sharp interactive exercises can be undertaken to provide light-bulb moments. The energy of the 'moment' can be maintained over the shorter timeframe, which students can commit to. Furthermore, new successful entrepreneurs can commit to spending time at a two-day event rather than a five-day event with more interaction between student attendees. Larger numbers of students can be catered for; further adding to the diversity. All these factors confer a more vibrant dynamic for the event.

Programme for April 28-29, 2011
QUT, Gardens Point, S Block, Room S305
Thursday April 28

9.00am **Registration (Tamara Playne, Chris Collet, Jessie Roberts, Julian Kapitzke)**
Have a coffee or tea while you do the first activity which is to consult Ideas and People Posters and log on to the OWL (Open Web Learning) session

9.40am **Welcome and Introduction (Tamara)**
Why are you here? What will happen in this seminar? What is OWL and how will we use it here?

9.50am **Herding Cats on Acid (Michael Doneman presenting, Jessie moderating on OWL)**
Creative thinking will get you everywhere, but where do you want to go? Edgeware founder, Michael Doneman gets us in the mood for creating the future

10.30am **Creativity towards Commercialisation (John Kapeleris presenting, Jessie moderating on OWL)**
For a contrasting view on creativity, John Kapeleris, Deputy CEO, Australian Institute for Commercialisation, will align creativity to the commercialisation pathway.

11.00am **Morning Tea (Michael Doneman and Jessie circulating)**
Complete your poster activity over a coffee. Select an idea from the Ideas Pool

11.15am **True Adventure: The Zova story. (Niall McCarthy presenting, Jessie moderating on OWL)**
Real QUT undergraduate. Real entrepreneur. Niall McCarthy, Zova founder.

11.45am **Market Research & Competitor Analysis (David Ball presenting, Jessie moderating on OWL)**
It's a jungle out there. Market Research Analyst, David Ball, slashes through the undergrowth to show you how to find a good fit for your innovation. Get your machete ready.

12.15am **Ideas Pool Swim Squad (Tamara introducing activity. Niall, David, Michael and Jessie facilitating)**
In groups, grab an idea from the Ideas Pool and make it float using the content from this morning's presentations.

12.45am **Lunch**
Meet and greet

1.15pm **Marketing and Branding (Ben Johnston presenting, Jessie moderating on OWL)**
How do you attract the attention of your market? JosephMark Founder, Ben Johnston, knows how to convert a couple to a crowd. He shows us the importance of communicating your innovation.

1.45pm **Differentiating with Presentation and Pitch Skills (Barry O'Sullivan presenting, Jessie mod'ing OWL)**
A great innovation will not sell itself. Barry O'Sullivan from Sustainable Change shows us how to get the jump by being a compelling presenter.

2.25pm **Ideas Pool Swim Squad (Tamara introducing activity, Ben, Barry, Michael, Jessie facilitating)**
Back in the pool again: this time Integrating Marketing, Branding, Pitching and Presentation content into your innovation development from this morning.

3.00pm **Summary and Finish**

Friday April 29

9.15am **Arrival (Jessie and Michael up for a chat)**
Coffee and Tea

9.30am **Surviving the first two years as an entrepreneur (Tamara: MC, Panel: Niall, Neil, Michael)**
What does it take? Your chance to ask the questions of our panel. What is an entrepreneurial mindset?

10.00am **Smart Services for Businesses in Queensland (Caitlin Baumann presenting & Jessie moderating OWL)**
Caitlin Baumann from Qld Government's Business Support Centre, navigates you through the regulations, licensing and business planning tools required for doing business in Queensland. Forewarned is forearmed.

10.30am **Morning Tea (Michael and Jessie circulating, Caitlin available for questions)**

11.00am **Finance and Business Planning (Neil James presenting, Jessie moderating on OWL)**
Make sure your innovation map has a treasure chest on it. Neil James of the Australian Centre for Entrepreneurship Research maps out the often-neglected priorities that underpin innovation success.

11.30am **Ideas Pool Swim Squad (Neil, Niall, Jessie and Michael)**
Integrating Business Thinking into your innovation development from yesterday

12.00pm **Group Presentations** (3-5min per group) **(Tamara and Jessie)**

12.30pm **Conclusion (Tamara)**

Open Forum: What do you want from QIS? (Tamara and Jessie)

Complete Evaluation Survey

12.45pm **Pizza & Book Swap**

Michael Doneman	0402394166	michael@edgeware.com.au
Jessie Roberts	0468860833	Jessie.roberts@qut.edu.au
John Kapeleris	38535212	john.kapeleris@ausicom.com; paula.hunt@ausicom.com
Niall McCarthy		niall@zova.com
David Ball		david.ball@ausicom.com
Ben Johnston		ben@josephmark.com.au
Barry O'Sullivan		barry@sustainablechange.com.au
Caitlin Baumann		Caitlin.Baumann@deedi.qld.gov.au
Neil James	0405188664	rn.james@qut.edu.au

Activity: BUILD YOUR BUSINESS (Five day course)

Marketing Copy

[A full flier is also provided below. The course is provided by Edgeware Creative Entrepreneurship on behalf of the QIS; see Partnerships in Chapter 5.]

Build your business!

Make Money, Have Fun, Change the World.

Create a one-page business plan in class using Simpler Business tools

WHEN AND WHERE?

Tuesday 10 – Saturday 14 April 2012
10am – 4pm each day
QUT Innovation Space
QUT Gardens Point, G 309

Aim

To present the hard-core basics of building businesses out of an idea in five days. Graduates of the course develop a one page business plan that they can move forward into an actual business.

The Details

Frequency: Four times per year
Time: Five days
Max ppl: 16 *Min ppl:* 12 – need to allow for attrition, doesn't work with less than 10.
Booking required: yes
Target Audience: Entrepreneurially inclined students from across QUT.
Delivery: QIS partner: Edgeware Creative Entrepreneurship.
Expenses:

- Catered lunches and morning teas ($300 plus)
- Gifts for speakers and parking costs

Reflection

The five-day course was introduced as the next-step after the Innovation Boot Seminar (1.5 days, see above) in the progression from idea to concept product. Many of the students from the initial boot-seminar subsequently completed a five-day course. Students had to explore the potential of their ideas to a greater degree using Edgeware's proprietary tools and a number of potential new ventures developed.

Edgeware Creative Entrepreneurship presented the course free to QUT students and staff under a partnership agreement (see Chapter 4). It is worth noting that having a serial entrepreneur deliver such courses provides the perspectives that underpin course credibility.

Although Edgeware has a brace of excellent tools, various versions of these appear in a number of widely available resource books such as those listed in Appendix H. The topics covered over the five-day course included: personal goals and motivation, value propositions, understanding the customer needs and values, competitor analysis and strategy, business objectives, building a business plan, defining an action plan, developing networks, focusing on the goal, and managing growth and diversification.

The outcomes and feedback around these courses were excellent. The dynamic of, and attendances at, the five-day courses were, however, difficult to maintain for reasons that included competing commitments for the participants and the validation process that, at times, showed potential products would not fly. For those that completed the intensive course, it was clear that they were more committed to an entrepreneurial career pathway, understood what that career path entailed and what was required for success.

The five-day course began as an event scheduled for four times a year. After 18 months, it began to experience difficulties in attracting a full cohort (18) of participants. The first courses attracted mostly QUT students; by the end QUT participants were in the minority with many external participants attending because they saw the advertisement on the QIS web site.

In hindsight, the QIS should have run one short course/workshop (1.5 days) twice per year and followed each of these with a five-day course.

EDGEWARE

QUT Innovation Space

BUILD YOUR BUSINESS

Make Money, Have Fun, Change the World

Create a one-page business plan in class using Simpler Business tools

WHAT IS IT?

BUILD YOUR BUSINESS is a business skills program aimed developing viable new business, or a new strategy or profit (surplus) centre for an existing business. It will also help existing organisations who want to build business activities from within. BYB is highly personal, relationship-based, modified for individual needs and talents and capable of changing as circumstances change. And it's delivered with a sense of humour!

WHO'S IT FOR?

Socially-committed people who are interested in starting a new business that makes a real difference, or creating new revenue for an existing business. (And this includes not-for-profits – we recognise that 'not for profit' also means 'not for loss'!)

WHO'S OFFERING IT?

The program is offered through a partnership between Edgeware Creative Entrepreneurship and QUT Innovation Space. Edgeware is a highly effective and innovative education system for ethical, socially-aware entrepreneurs and 'intrapreneurs'. We base the BYB process around a suite of Simpler Business planning and decision-making tools, combined with rich interactions with highly skilled facilitators who have 'walked the walk'.

WHAT DOES IT COST?

Edgeware offers this course free of charge

WHEN AND WHERE?

Tuesday 10 – Saturday 14 April 2012
10am – 4pm each day

QUT Innovation Space
QUT Gardens Point, G 309

Build Your Business Tools include: Forming an idea and business case, clarifying product/service offerings and target market segments, giving customer value, defining objectives, marketing, pricing, and other tools which together form a One Page Business Plan. BYB puts new ideas through a sieve, as part of a recipe for success.

WHAT THEY SAY

I particularly found useful that I can now scope a project and build a business plan in 24 hours, then either discard the concept or make a decision to run with it. Prior to my Edgeware learning this could have taken weeks. For me, you absolutely nailed the mix of skills any Intrapreneur (modern manager) needs, combining decision making tools and inexpensive marketing processes. Your program had it all, terrific content and a great mix of facilitators. *Wayne Lee, Business Relations Manager, Career Keys, Logan City*

Networking is a key to success in business, especially in regional Queensland and Edgeware gave me the opportunity to connect with other local like minded people. I connected with other Edgies and with presenters with long term partnerships developing as a result. Michael Doneman is fantastic at encouraging these connections. His passion for creative entrepreneurship is contagious! *Shelley Pisani, Creative Regions, Bundaberg*

Edgeware takes a bunch of people with big ideas, throws them in a pot, sprinkles them with hard-won wisdom, gives them a stir, then lets them stew. It's a great way to meet like-minded souls and thrash out what it takes to get your venture off the ground. Alan James, *Al et Al, Noosa*

It was great. A course like this should have been around 20 years ago. *Stephen Davies, Weed & Pest Control, Kununurra*

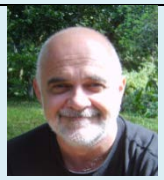
WHAT'S INVOLVED?

Workshops are facilitated by Edgeware's founder, Michael Doneman, with sessions from guest presenters on leadership and management, intrapreneurship (working entrepreneurially within existing organizations) and marketing

WHO CAN I TALK TO ABOUT IT?

Michael Doneman
0402 394 166

Websites
www.edgeware.com.au
www.michaeldoneman.com



MICHAEL DONEMAN has a background in community cultural development and more recently in business training, enterprise development, vocational education and training, and information technology. He has developed an innovative practice in informal education – the practical, 'just-in-time' provision of skills, networks and interactions necessary to meet individual and community needs. He founded the Edgeware model of education for ethical entrepreneurship in 2006.

Contact us for enrolment forms – info@edgeware.com.au

Activity: SPONSORING FACULTY COMPETITIONS (Events/Service)

Competitions provide a high profile approach to instilling entrepreneurial skills in undergraduate students. While there is a focused outcome at the end of the competition, structured training sessions provide a framework of learning that raises the standard of both the outcomes and the presentations to the target audience. As competition presentations usually involve external sponsors and academic leaders from within the university, there is a need to ensure a high level of professionalism in student delivery.

Competitions can occur at a variety of levels: within faculties, as university-wide events, and in an inter-institutional context. With each step up a level, the effort and resources required increases by an order of magnitude.

The QIS also facilitated and supported competitions other than its own. The following presents an example of such a competition, the largest the QIS became involved in: a trans-university competition (Engineering for Humanity) and a curriculum-based competition.

Competition Case Study – Engineering for Humanity

Each year, Engineers Australia celebrates Engineers Week to highlight the benefits of engineering to the wider community. The designated theme for 2011 was the "Year of Humanitarian Engineering". The (then) Faculty of Built Environment and Engineering (BEE) at QUT chose the theme of Engineering for Humanity (E4H) Challenge targeted at improving the lifestyles of the disabled. The original intent of the E4H Challenge was to have the competition targeted solely at the different cohorts of engineering students (mechanical, electrical, design). BEE marketing staff approached the QIS for help with the competition.

With QIS input, the competition was opened to students from faculties across the university. The QIS network of industry representatives was contacted to elicit sponsorship and these contacts also passed the e-mail onto relevant target contacts in Government agencies and foundations dealing with disabled people. Furthermore, opening the competition up to other faculties also loosened the purses of other Deans of Faculty. The QIS secured sponsorship exceeding $20,000 that funded the prizes, event catering, marketing and the Master of Ceremonies (Ms Bernie Hobbs, ABC presenter and QUT graduate).

Advertising of the E4H Challenge, was conducted through targeted e-mails to course cohorts across all faculties at QUT, through major announcements on various internal QUT web sites and via the QIS Facebook and web sites. Following announcement of the challenge, team formation (if required) was facilitated through a website

where students entered their details and could view the details of other students. Team formation was also facilitated through the training sessions. Students from different disciplinary areas were encouraged to form teams and, although there was variation in team sizes, most averaged around four members from a diversity of courses.

Important 2011 dates and events

Time	Date	Semester Week	What	Where	RSVP
1.30–3.30pm	2 Aug	2	Launch of the Challenge	O Block level 1 GP	YES
11.00am–3.00pm	5 Aug	2	'Meet Some Engineering Students' QUT engineering student clubs, BBQ and Music	O Block level 1 GP	NO
2.00–3.00pm	10 Aug	3	'Find Your Team-Mates' Do you have a great idea but no team... or half of your team but no clue? We might be able to help you	G Block Room 309, GP	YES
TBA	19 Aug	4	'Creativity and Idea Generation' Workshop by Michael Doneman from QIS	G Block Room 309, GP	YES
11.00am–1.00pm	24 Aug	5	'Idea to Product' Presentation by Hunter Walkenhorst, Commercialisation Manager from Blue Box	TBA	YES
12.00pm	24 Aug	5	Registration of Teams Close	Online	NO
10.00am–12.00pm	31 Aug	6	'Guided by reality, need and the environment' Workshop by Michael Doneman from QIS	G Block Room 309, GP	YES
10.00am–12.00pm	2 Sept	6	'The Market: Observe, Analyse, Plan and Strategise' Workshop by Michael Doneman from QIS	G Block Room 309, GP	YES
10.00am–12.00pm	7 Sept	7	'The Market: Observe, Analyse, Plan and Strategise' Workshop by Michael Doneman from QIS	G Block Room 309, GP	YES

While the engineering faculty undertook the major role of project management, organisation and marketing, the QIS provided mentoring and structured training sessions to the teams in areas of creative thinking, prototyping, market research, business planning and presentation skills. The latter was considered highly important given the target audience of industry invited to the presentations. The QIS also helped with team formation. The competition ran for three months across two semesters with the training sessions presented twice to capture all the teams.

Teams went through the process of choosing a disability to focus on, talking to persons with the disability to ascertain the real life difficulties and then designing products that could help change lifestyles. Two rounds of submissions were screened; a first cull reduced the teams from 16 to ten. Additional training sessions were undertaken for the ten teams. The judges then reviewed the proposals to arrive at a final five to present to the panel.

Posters of the teams that made it through the first round cull were placed in library in advance to allow the student population at QUT to vote for a People's Choice Award.

The final judging session involved five-minute elevator pitches to an audience of invited industry guests, sponsors and academics.

Time	Date	Semester Week	What	Where	RSVP
12.00pm	11 Sept	7	1st round submission	Online	NO
5.00pm	23 Sept	9	1st round winners announced	TBA	NO
TBA	28	Semester Break	'Presentation Skills' workshop by QIS	G Block Room 309, GP	By Invitation Only
TBA	28	Semester Break	'Business Strategy' Coaching by QIS	G Block Room 309, GP	By Invitation Only
9.00am	17 Oct	12	2nd round submission	TBA	NO
TBA	2 Nov	–	Presentation finalists notified	–	NO
5.00–7.00pm	4 Nov	–	Final presentation and winners announced	TBA	By Invitation Only

Prizes ranged from $5,000 to $1,000 with an additional $5,000 cash and $5,000 in kind

contributions from sponsors from the commercialisation industry available to the winner if they chose to proceed with commercialisation.

A number of issues presented themselves for resolution. Some teams avoided the training sessions, but independent arbiters coincidently culled these teams during the screening process. Ensuring novelty of the product was a major challenge. Some of the products put forward by teams could be found on the web within five minutes of searching. Training sessions had to include an element that addressed the nature of novelty and patent infringement. However, it should be noted that the winning prize – a walking cane for the blind – combined a number of separate technologies coming off patent.

The winning team chose to commercialise the product and used the QIS resources to further this aim.

An unexpected and long-lasting problem arose when two members of the four-person winning team decided to pursue commercialisation and cut-off the other two members. A missing component of the challenge was a binding team agreement that stipulated distribution of monies and ownership of the intellectual property post competition. The real world learning experience for this team came after the competition and involved 12 months of dispute resolution, mediated by the QIS Project leader.

QUT "Engineering for Humanity Challenge"
Multidisciplinary entrepreneurship challenge open to all QUT disciplines and courses.

Do you have an idea worth $10,000 that can improve people's lives?

The Challenge

Design an innovative product to allow people with disabilities to be independent and perform daily life activities.

The Prizes

1. 1st Prize - $5,000 cash
2. 2nd Prize - $2,500 cash;
3. 3rd Prize - $1,000 cash; and
4. People's Choice Prize - $1,000 cash.
5. **Humanitarian Engineering Innovation Prize** - QUT may (in its absolute discretion) award Team (including the People's Choice Team) $5,000 cash as a contribution towards developing their product + $5,000 for market research of the product provided through the Australian Institute of Commercialisation.

What do you need?

1. Create a multidisciplinary team (see conditions) by 24 August.
2. Come up with an innovative product proposal to assist people with disabilities.
3. Follow the judging criteria guidelines.

Activity: SUPPORTING CURRICULUM (Service)

Pockets of targeted EE exist across the university curriculum. One role the QIS undertook was to support these efforts. As well as presenting occasional lectures on creativity and innovation into business programs, QIS staff acted as judges (i.e., assessors) for small pitching competitions embedded in two consecutive subjects in the QUT School of Design.

Both Design subjects served as awareness-raising exercises to introduce the innovation and commercialisation pipeline. Such contexts also provided opportunities to attract students into the QIS activities and indeed several new ventures, developed in these subjects saw their initial development continued in the QIS and its mentor program.

DNB602 New Product Development involved teams of students developing prototype products after brainstorming sessions around creativity. The topics covered include idea generation, new product development process, strategic planning, marketing and commercialisation. These often made their way to the QIS.

DNB701 Design-Led Innovation took the process a big step forward. In this subject, pre-existing emergent technologies were introduced to the students from start-up firms and the students had to re-design an application and product line suitable for the technology.

Figure 5.2 – SponsorMe is an example of a potential new venture that was born in the subject DNB602 and then progressed into the QIS for further development of the concept. The business concept revolved around a web-based service company that sold branded products through a club-like structure. In this instance, the club was targeted at cycling enthusiasts, offered cycle routes in and around major cities and held competitions, time trails and performance assessment profiles. A bottleneck for this project was the availability of web programming.

Activity: STUDENT INNOVATION EXCHANGE (Service)

Marketing Copy

Nil.

Aim

To create a forum where the skills and talents of entrepreneurial students can be shared amongst the community to progress fledgling new ventures.

The Details

Unlike other QIS activities, the exchange comprised a passive service announcement. One large pin board in the QIS was divided down the middle to form two columns. Each column had a sign as a heading: one sign read 'I Want…' while the other sign read 'I Can Offer…'.

Students were encouraged to seek skills to progress their own entrepreneurial venture or donate skills to help others. Cards were pinned to the appropriate column listed the wants or the offers of the students along with contact details. Rather than monetary recompense, a barter system was supposed to develop around sharing skills to benefit each other.

Reflection

While this was conceptually simple and should have developed into a popular method of sharing skills, in truth the Innovation Exchange never went anywhere. A few exchanges were made between student entrepreneurs but the main problems seemed two-fold:

1. Finding the time to devote to someone else's interests to the detriment of their own venture.
2. The majority of 'wants' related to IT skills, specifically building web sites for new ventures in a world dominated by web-centred business models and web-based delivery of products and services, including Apps. Chapter 5 has detailed the broader issues around web-based IT skills. Suffice to reiterate that there was a shortage of these skills.

One option that was explored was to employ an IT specialist, however this was quickly discounted as too expensive.

Activity: MENTORING (Service)

Marketing Copy

Nil.

Aim

To provide guidance for students in the idea development process as well as connections to relevant industry mentors.

The Details

The mentor program took a number of directions as the QIS evolved to focus on skilling people rather than on new venture creation, and as challenges were uncovered and needed resolution.

Students booked into a one-on-one session see the QIS mentor for an idea feedback and needs assessment session. The QIS mentor worked with the student to guide them in the idea development process. Once students had a clear concept product developed they were connected to three relevant industry mentors for a 'feedback coffee date and raincheck'. This provided an opportunity for the students to gain perspective and insight from people who were working in their industry and had a wealth of experience they were willing to share about the entrepreneurship process.

The framework of the QIS Mentor program is provided in Appendix D1.

Reflection

The QIS mentor program provided meaningful needs based mentoring to students developing an idea or business. Some indication of the usage by students indicates the program was a success:

- Total mentor sessions held with QUT Mentor = 95
- Industry mentor sessions facilitated = 25
- Students that engaged with the mentor program = 46
- Average # sessions each student undertook = 5.4 (excluding students who only engaged for one feedback session).
- Total industry mentors that provided support = ~20

Within the program, students were connected to local entrepreneurs that were relevant to their project/industry and the program was instrumental in shaping the plans of emerging entrepreneurs (see Appendix F – Mitchell's Story).

The types of connections that developed included the following: student – student, student – industry, researcher – student, researcher – industry, student – lecturer and researcher – lecturer. Through this framework of connections it was possible to leverage the large supply of university resources and human capital. The student –

student conduit proved to be a stable connection that prevailed and even a student who is one month ahead proved to be a valuable mentor.

In the concentric circles model used to describe the students' entrepreneurial pathway (as discussed in Chapter 4), the mentoring program served to even out the trajectory from a haphazard approach towards a spiralling pathway with progress towards a product. There were still regressions, but the mentor process sought to minimise these through instilling a conceptual understanding of the components of the pathway regardless of the viability of the final concept product.

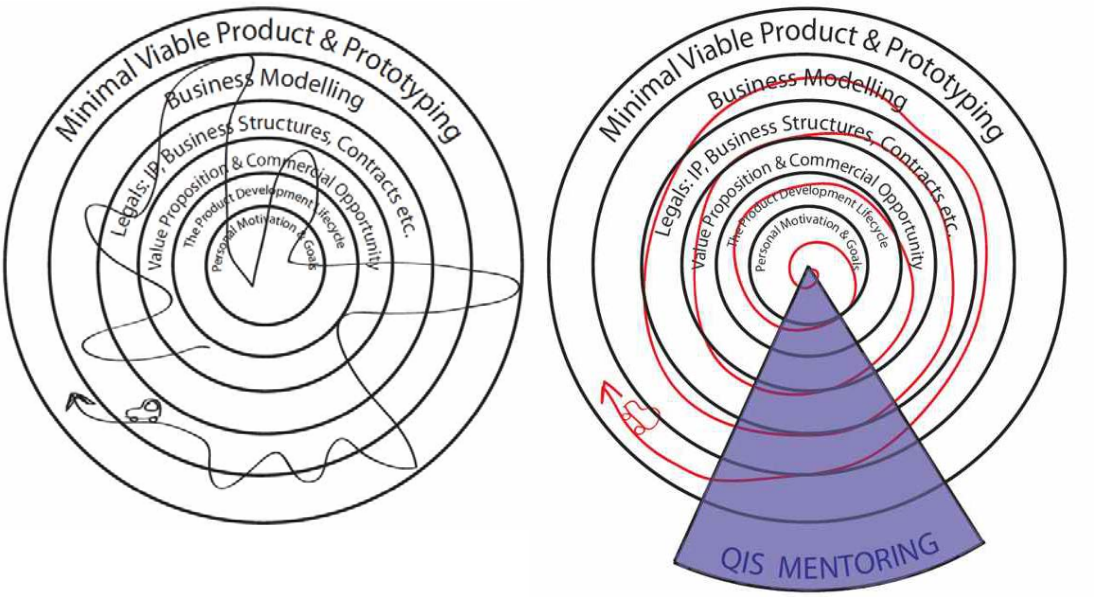


Figure 5.3 – The mentorship program changed the trajectory of the students' entrepreneurial pathways from chaotic (left) to having direction (right).

Although successful, the mentorship program model did face several challenges.

With regards to scalability, the program relied too heavily on the availability of the QIS mentor and easily reached capacity. The network of mentors also relied heavily on the contacts of one or a few people; quite often this was the time-poor Project Manager. Clearly, a dedicated staff member was needed for the mentor program to act as dating agent and connect student to mentors.

As noted previously, it was very quickly identified that most of the ideas that came to QIS were very early stage and often required development prior to be referred to an industry mentor. The QIS project manager worked with the student in the development of their idea, and although this process was standardised, delivering on a one-on-one platform is resource intensive and impossible to deliver on a university wide scale.

The important point to make is that a stringent approach was put in place by the Project Manager to ensure that the students understood each step of the components outlined in the concentric circles model and were progressing along the

pathway, even if the process was not stage-gated *per se* or dependent on product viability. Importantly, the approach started with assessing the core motivations of the student.

Peer mentor sessions held as a group meeting, where many students got to talk with a variety of mentors in the same session, was trialled and proved to be more successful than initially perceived.

Subsequently, a new framework for the QIS Mentor Program was developed at the end of the QIS project that took the insights and lessons from the first mentor program model and applied these to a framework of group mentor sessions that is scalable and more resource efficient.

The proposed framework for the day-long QIS Mentor Clinic is presented in Appendix D2.

Activity: INTERNSHIPS IN START-UPS (Service)

Marketing Copy (Student)

What does it really take to turn an idea into reality?

See for yourself by enrolling in the QUT Summer Start-Up Internship. Be immersed in the Brisbane Start-Up scene by for one of the residents of Co-working space and start-up incubator River City Labs.

If you have ever thought about creating a game changing business or technology, here is the opportunity to start building your contacts, experience, knowledge and get a sneak peek into what it's really like turning an idea into reality.

The QUT Start-Up Internship gives entrepreneurial students an insight into the dynamic and exciting nature of a start-up business.

Aim

To network with Brisbane-based start up ventures and encourage them to impart skills training in would-be entrepreneurs. To give entrepreneurially minded students an opportunity to see what it is like to build a start-up before they take the leap.

The Details

Documents describing the process are included in Appendix A7. Briefly, the QIS Start-Up Internship provides a culturally immersive experience that enables students to gather the intangible skills essential to an entrepreneurial mindset. The internship also enables practical exposure to contacts, peers, mentors and an ecosystem of other connections necessary to successfully establish a new venture.

The internship derived from a partnership with River City Labs where interns work with resident start-ups at River City Labs. Importantly they were immersed within a community of entrepreneurs and a culture of idea generation, evaluation and commercialisation.

Reflection

The notion of internships in the dynamic environment of start-up ventures was expected to be a popular option for entrepreneurially inclined students potentially looking to start their own companies. Seeing first hand how to transition a prototype product to the market provides the experiential learning to avoid your own mistakes; to a large degree learning from failure (and success) is the essence of entrepreneurship (see any of the textbooks listed in Appendix G). Another lure is employment, or even partnership, in the start-up company. In reality, the internship program struggled to find students interested in the exercise, which was held over the summer of 2012. The internship deflected students from their own holidays and/or work commitments.

Chapter 6 – Facilitating Start Ups

Although the predominant area of skills training by the QIS evolved to target very early stages of the innovation and commercialisation pipeline, a number of focused student ventures worked towards prototyping and commercialisation in the QIS facilities – we called it a business hatchery.

Start Ups and Residency

A simple evaluation (filter) process was implemented to transit concept products or services from the casual QIS visit into a residency program (i.e., hatchery). Over a series of three meetings with a member of QIS staff, the student entrepreneur had to address questions as follows:

- What is the problem being addressed?
- How does the innovation solve the problem?
- How is the innovation novel?
- What is the competition in the area?
- How will the innovation be developed?
- What resources are needed?
- Impediments to development?
- What is the extent of disclosure?
- What commercial relationships or sponsorships may already be held?

Even this simple filter process, in contrast to the more substantial stage-gated entry and process proposed in the beginning of the QIS project, did serve to detract some students and this came back, yet again, to concept validation and a belief that the potential product will take the market by storm. If the student entrepreneur shows commitment and drive, residency and mentorship is explored.

Due to limited space, residency meant allowing the students free reign of the three main QIS rooms and resources to facilitate venture progression, providing ongoing advice and directions to the new ventures and forwarding the students to industry and academics for particular issues (i.e., mentoring).

The most important lesson that emerged during the QIS project is that a business may not be what ‘we’ think it should be. Universities are traditionally invested in technology commercialisation, as are the traditional incubators (as discussed in Chapters 3 and below), and it was a difficult set of blinkers to shed. The new generation of entrepreneur are inventing new business models, have different values (not necessarily aimed at the fast-buck approach to profit making) and thinking of different types of products that do not have a reference comparison for others experienced in commercialisation pipeline process. Our approaches, thoughts, opinions and processes could be considered ‘traditional’.

Web-based service ventures were the major type of new product proposed by entrepreneurial students. As discussed below (Chapter 7), this type of product brought a suite of problems to the QIS, not easily solved.

The following cases provide examples of new ventures that began and/or progressed through the QIS. The QIS cannot necessarily lay claim to the creative moment, but it can lay claim to furthering the entrepreneurial capacity of the person/s involved. The examples were chosen to highlight the different types of projects that students brought to the QIS; most would not have entered the QIS student incubator as originally proposed.

Case Study 1: Jim Huang – the Grove Markets and Corn Corn

Jim was a casual drop-in visitor to the QIS, often hanging around after attending weekly activities. His ideas about a business were very inchoate although he acknowledged that he wanted to do something in the food area. As casual talks continued over the months, Jim also expressed passion for markets. The QIS staff encouraged Jim to undertake the Build Your Business course where he combined his two interests into food markets with a difference.

It was a short time afterwards that Jim launched his market stall Corn Corn. He also noticed that QUT did not have any formal markets on either Kelvin Grove of Gardens Point campus (commercial opportunity recognition) and began his process of building a company that ran and managed weekly markets on the Kelvin Grove campus – The Grove Markets. The current stalls are a mix of local food producers and various student societies and clubs from around QUT. Jim has progressively attracted more stallholders to his markets each month. He plans to expand onto the Gardens Point campus.

Jim's own food stall, with his mother helping out, focused on 'food with a difference': fried corn on the cob, corn slices, corn fritters, corn cakes, corn soup and corn bread. Lately, fresh organic produce has been added to the list of items on sale at the stall, along with Asian-style coconut milkshakes, taro fritters and other treats. The latest product line is an extensive line of gourmet breads.

About us

Corn Corn began its life as a food stall that was obsessed with all things corn. Our vision was to create food related to corn that tasted so good that the best word to describe was "cornilicious".

We started with the humble corn on a cob and expanded to corn fritters and even a cake made from corn. Customers have given us the thumbs up for the delicious and healthy products and excellent customer service.

A common suggestion by our customers was to diversify our menu to inlcude food outside of corn. We listened and diversified our menu to include Asian food, taro and potato. However, our motto however remains the same - to create that "cornilicious" taste.

Please support us on facebook by clicking

Like

You can check out your corn face pics on facebook.

Where do you find us:

Every Saturday: Kelvin Grove Village Markets
Every Sunday: Eagle Farm Markets
or at festivals, fuctions and events

Menu:

Corn fritters, corn cake, corn on cob, corn soup, taro fritters, rice dumplings, and Chinese food.

Contact us: info@corncorn.com.au

Figure 6.1 – Jim cooking corn in his stall, his mother is preparing food in the background.

Jim represents a typical student with an entrepreneurial leaning. He was unsure of his goals, except he knew he wanted to do something around food and community (his personal motivation), he was unsure of his product (his value proposition) or the pathway for turning his desire to do something into reality (his product development process and lifecycles), and he had little skills in the area and a little knowledge.

The Build Your Business course in the QIS focused Jim's aspirations and ideas – from building a 3D business plan on the floor Jim developed the beginnings of an entrepreneurial career.

The markets at QUT represent a cautious approach to building market knowledge and the requisite business skills that will be applied over his future career (business models). He is certainly more confident about his future plans as a food marketeer.

Visit: <www.corncorn.com.au>.

Case Study 2: Mitchell Cox – Vertic Education

To demonstrate how concepts may change and where the path may lead, a vignette of Mitchell's story of interaction with the QIS and the outcomes is reproduced in full in Appendix F1.

Vertic Education began as an idea to provide support to high school teachers in teaching complex biological science concepts to secondary students and inspire students to consider a career in science. Since the first molecular manipulation of DNA molecules in the mid-1970s, the life sciences revolution has set an unrelenting and breath-taking pace that has made science fiction scenarios now commonplace in everyday life. The problem for secondary school teachers is to maintain currency of the life sciences disciplines; old disciplines that are converging with the non-life sciences areas (chemistry, physics, engineering) and new disciplines emerging as a consequence (e.g., biotechnology, nanotechnology, biocomputers).

Mitchell wanted to inspire young people that science is cool and inform schools of the latest

discoveries in science. Mitchell's product development path demonstrates the importance of identifying personal motives behind an idea, and not giving up if the idea has a few holes.

Mitchell's initial product was a series of "Mad Scientist" workshops that would deliver curriculum relevant 'new' science breakthroughs to classrooms of year 11 and 12 students in an engaging and interactive format. QIS worked with Mitchell to focus on his motivations (and not be boxed into his first product idea). Mitchell was making revenue from his workshops right from the beginning but he soon realised they were not scalable. However, by submerging himself into local schools delivering workshops to students he saw an opportunity to connect teachers with relevant curriculum and current science material packaged for the classroom and coupled with an online platform to support the teachers.

Our Program

Overview

After a successful in-class series around advancing science, **Vertic Education** has expanded to provide a fully online service.

We build short interactive videos that cover core concepts in easy-to-understand language; as though each student has an individual tutor.

The online format allows for a high degree of **flexibility** to suit the style of an individual teacher. Present the lessons in class as a taster for students, or ask them to view them at home as a study tool. They are also designed for implementation into "flip-teaching", which allows the teacher to shift away from mass delivery of content to focusing on a student's area of need.

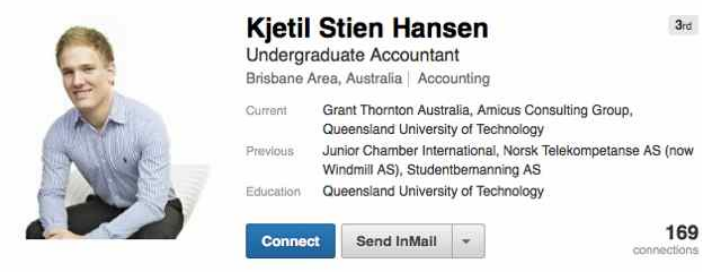
They are also an ideal tool for teachers wanting to refresh difficult molecular biology concepts before delivering topics in class. Our workshops are **constantly updated**, so it removes the risks involved in using old textbooks or the static web pages.

While completing the final year of his undergraduate science degree, Mitchell attended the Pitching Workshops, competed in the Student Start-Up Night and made use of the QIS Mentor Program.

From the initial birth of the idea Vertic Education has evolved significantly: the company moved to a partnership model to spread the investment and labour requirements, shifted to an on-line mode of teacher support, remodelled the products from a better understanding of customer needs and is redeveloping its products to address a larger audience. And importantly, as Mitchel writes: *still generating revenue*.

Visit: <www.verticeducation.com.au>.

Case Study 3: Kjetil Stien Hansen – Amicus Consulting,



Kjetil Hansen came to QUT to study business on a one-year international exchange from Norway.

Kjetil saw an opportunity to start a student consulting business that provides market research to large organisations and brands. The project would give students an opportunity to gain real world experience with real clients and provides organisations with access to primary and secondary market research services. Through these projects with industry, students would have an opportunity to network and gain invaluable practical experience prior to graduating.

The model is not a new concept, it is offered on a much grander scale by two Norwegian student-centred companies: StudConsult (<www.studconsult.no>) and NHHS Consulting (<www.nhhsconsulting.no>). The student consultants in these two organisations are paid employees. For the students, the part-time work provides relevant experience and skills. In this instance, Kjetil saw a need in the Australian university landscape for a similar organisation that would provide relevant skills to business students.

Kjetil founded Amicus with a team of students possessing a range of disciplinary skills in IT, law and business. The QIS worked with Kjetil and Amicus as they implemented their business concept and provided resources to get the project off the ground. The main challenge for Amicus was balancing university deadlines and the enormous workload encumbered by taking on an ambitious extra-curricular project. Nonetheless, Amicus recently completed a market research survey for a QIS industry mentor. They have interviewed over 600 customers for this business, and have reported their findings.

Overall, the students have found the development of Amicus, engaging with industry clients, determining the appropriate organisational hierarchy, delivering a quality product, and other aspects of Amicus operations as invaluable experiences. However as the students approach graduation, the succession of Amicus to a new student cohort looks not to happen. Although the project provided a vehicle for developing the entrepreneurial mindset and acquiring skills, it has limited application outside of student life.

Case Study 4: Michael Larkins – serial entrepreneur

A vignette of Michael's story of interaction with the QIS and the outcomes of his entrepreneurial learning is reproduced in full in Appendix F2.

Michael first came to QIS with an improved welding system that addressed a particular problem he experienced when he was hired by a local mining company to work in the mines. It was a high capital, high-risk project and he was unsure as to the best way to proceed to commercialisation given that this pathway, by necessity, involved technology licensing and significant financial investment. On the basis of advice from the mentor, Michael was able to pursue a sensible licensing/development strategy for the welding technology. With the recent economic downturn that has seen the mining sector contract, the mining company cut its 'blue sky' R&D projects but has very recently expressed interest in pursuing the project once again.

Michael Larkins is an example of a highly technically competent science PhD candidate that came to QIS with minimal business experience. Michael was highly innovative in his thinking and a great problem-solver. Michael's approach came from directly observing a problem and then realising his technical skills could solve the problem. He did not know or understand how to validate his ideas around potential products and then turn his ideas into commercial opportunities. Understanding the process has, in turn, led Michael to embed the entrepreneurial perspective in his science activities and that has allowed Michael to evolve from being a highly capable problem-solver to being a serial entrepreneur. As an older student in the postgraduate stream, Michael has a greater breadth of life experiences in comparison to the average undergraduate student and he has been able to capitalise on

his experiences and newfound interests in entrepreneurship. Indeed, Michael now has several projects running concurrently external to his PhD studies including one that already generates a profit.

Michael was also working on a non-profit project regarding organic waste recycling, and the QIS also arranged an industry representative to provide feedback and mentoring on this project. Michael also used the mentoring sessions to brainstorm other ideas and validate his approaches.

Additionally, Michael regularly took part in the Pitching Practice sessions as a means to overcome his introverted nature. These sessions were particularly challenging but extremely valuable in developing his interpersonal skills. Michael furthered these skills by becoming a QIS mentor himself and advising on the technical aspects of the projects brought to the QIS by undergraduate students less experienced than himself and with no technical skills.

Case Study 5: Tim Sheehan – medical technology

Tim Sheehan is a QUT alumni who wandered into the QIS after the campus signage caught his eye. Tim talked about his experiences in the USA to one of the QIS staff. While working for the Medical University of South Carolina, Tim helped develop some IP around host immune responses to bioimplants, which was never progressed by the university. The QIS staff encouraged Tim to seek ownership of the IP and lodge a provisional patent. Tim spent the next year in the QIS scripting and lodging the patent, and further developing the proof of concept for a system that tested the biocompatibility of surgical implants. Eventually, Tim abandoned the relatively simple implant-testing product when it became apparent that a number of groups and technologies were converging on the same concept and he would have to compete against universities and large medical biotechnology companies with established R&D infrastructure and commercialisation budgets. Tim recounts that the experience has been 'a huge learning curve', he has a better understanding of the process and all that it entails, and he is sure that he will go on to other ideas.

Case Study 6: Kevin Gosschalk – Skampa

Kevin Gosschalk provides an example of an entrepreneurial QUT undergraduate who developed a concept product while undertaking a summer internship project at university. His product began as a multi-user interactive and physical video game targeted at people with physical disabilities. The potential market extends beyond the latter cohort to the aged and the young. To attract university funding and progress the concept to prototype product, Kevin signed over his IP rights, post-event, to the university. To further develop and test his product, SKAMPA, the QIS Project leader arranged for Kevin to be allocated a room next to the QIS so that he could draw on

the energy and ideas of the student innovators and entrepreneurs that visit the QIS. Kevin's SKAMPA project was awarded $500,000 funding from Commercialisation Australia, the largest amount ever awarded by this government agency, and he employed an IT specialist to help with refining the product. Kevin was regular participant and contributor to QIS activities, including seminars. Through interaction with the MIC, Microsoft's Seattle headquarters became interested in the project for their Xbox Kinect system and were in the process of building a long-term relationship with Skampa when the project was licenced by the university to another party.

Kevin is a serial entrepreneur and has moved on to other projects. Visit: <http://www.kgosschalk.com/k+gosschalk/Home.html>.

The QIS had little involvement with Kevin's entrepreneurial path; he was already a serial entrepreneur. For Kevin, the QIS represented an opportunity to network with other entrepreneurs, both successful and emerging. Kevin gave a seminar to the QIS Innovation Boot Seminar and interacted on occasions, when his busy schedule permitted at Thirsty Thursday and other events. For the QIS, Kevin gave the space some much-needed early credibility as a home for entrepreneurs.

Reaching the Audience

It's life Jim, but not as we know it… Misquote of Spock to Kirk, featured in Star Trekkin' (1987).

As a business proposition, Jim's Corn Corn concept products (food stall and markets) would not have been considered as a viable new venture under the original QIS proposal for a stage-gated incubator. And yet the success of Jim's endeavours, and that of Mitchell and Kjetil, highlights a very important point to emerge from this project. In the stage-gated incubator model originally proposed for the QIS, none of their ideas would have gained entry. All provide examples of individuals learning entrepreneurial skills, facilitated largely by the QIS, and generating businesses but not necessarily as we originally thought businesses would be. The competitive and expensive nature of the biomedical devices industry coupled with the stringent regulatory and compliance regimes built around products destined for human consumption would also mean that Tim's concept product would have struggled to gain entry into an incubator. Without such restrictions, Michael's welding technologies would make it to an incubation process but only once a proof-of-concept stage had been reached after venture-capital investment. The QIS's contribution to Michael's project was to smooth the pathway to eventual proof-of-concept.

We return to the point about the nature of the training focus in Chapter 10.

Chapter 7 – Unexpected Issues Encountered

Just Who Is Our Client?

With the opening of the QIS, casual drop-in visitors soon became commonplace – some stayed for only a few minutes, but some spent extended periods of time in the space, every day, adopting the input from QIS staff and progressing products. Along the way, QIS activities evolved to better meet visitor needs and were well attended.

It soon became quickly apparent, in mid-2011, that a significant portion of the end-user group of the QIS was not comprised of QUT students and staff. Some visitors were students from sister universities within Brisbane and the QIS filled a need not available at our sister entities. Other visitors were non-university peoples, entrepreneurially inclined people who found the QIS and its activities through internet searches, word-of-mouth exchange or from seeing QIS advertising when wandering across the campus (the chalkboard was very successful in attracting casual drop-in visits).

People like Clinton Kerrison became a frequent visitor; he spent his time in the QIS developing a smartphone application that downloaded QRail train timetables (QRailDroid). While preparing an early seminar about the QIS activities that featured the work of Clinton, it surfaced that he was not a QUT student. Later, he was instrumental in upgrading our website with new Wordpress templates. After a year inhabiting the QIS, Clinton enrolled in a QUT degree.

During the QIS-Edgeware partnership, a substantial number of QIS users were people external to QUT. Towards the end of QIS and when Edgeware left there was slowly a shift back towards a greater proportion of QUT users and less outsiders. However, the events still attracted a few visitors from outside QUT.

The question became: do we cater for the general public? There was a lot of value in allowing the general public to engage in QIS activities; contributing a diversity of life experiences that added to the mix being one example of the benefits. In the early stages, the extra bodies added to the momentum of activities. Certainly, the broad audience diluted QIS efforts meant to target students to some degree.

As the QIS became well known, industry came to QIS through Internet searches or was directed to the QIS by QUT staff who didn't know where else to send them. Deloitte, for example, contacted the QIS to host their seminars on Design Thinking. The QIS served to direct industry people, with valid research and engagement projects, as distinct from those with a 'once-in-a-lifetime' business opportunity (see next section), to the relevant faculties. The QIS also attracted outside industry people who wanted to engage QUT in some 'innovative' way, some seeking to provide services to the QIS (as mentors and presenters),

while others were seeking other avenues of engagement with the university. These interactions were a direct product of having a physical space.

The word 'innovation' in the QIS title was the attractant; people thought this was the 'happening place'. It does highlight that, to the general public, and especially industry, there appears no obvious point of contact for 'engaging' with the university; there is no place *per se*. Titles such as Alumni and Development Office may not be the first place outsiders' look. It should be noted that QUT has a 'Giving' link on its home page.

With limited resources, the issue for the QIS of servicing the general public was something that had to be considered at various times. Suffice to say, there is no correct answer.

Business Opportunity or Slave Labour?

A common scenario that the QIS experienced was the phone call from someone with a potential business opportunity for a student. If only the outside caller could attract one, three or five students to work on their concept product, then all the participants would be immensely wealthy in a very short period of time.

Potential blockbuster products included mobile application programs (often), new beverage formulation and distribution markets, or new social media or web interfaces for companies. At first, the problem was how to filter the good from the bad and ugly. At the latter stages of the project, the issue became whether to bother at all with such external requests for student involvement in 'once-in-a-lifetime' business opportunities.

Clearly, some ideas and propositions had merit, however most were a blatant use of students as labour to get companies with dubious profit margins established or reflected the misconceptions around the real costs of setting up a company and competing in an IT-based world.

While the original QIS operations were conceived as having a pathway for external IP to enter the project and students to progress the IP, the reality was that the offers were less about IP of merit and more about the failure of business planning and start-up logistics on behalf of the external entity.

While QIS staff initially met with many of the external callers, sometimes over a number of occasions, in the end the time commitment to filter the proposition or nail down the value and process for the students meant that the exercises were overwhelmingly a waste of time with little real value for the students. In the end, such 'too-good-to-be-true' propositions often did not rate any response from the QIS.

Ownership of Intellectual Property

In a university environment, the ownership of IP is an area shrouded in misconceptions (see also below).

The first misconception that arose on occasions was the relationship between the university and student IP. The ownership of IP generated by students resides with the student unless

IP agreements have been signed which transfer the IP to the university. Within this context, and in undergraduate units where IP is generated as part of the coursework, the IP resides with students. For postgraduate students, enrolment in research-based higher degrees is usually accompanied by the signing of an IP assignment agreement. A special case exists where undergraduate students undertake (summer) internships, assignments of IP to the university are often (mistakenly) overlooked.

With the QIS project, the IP remained the sole property of the undergraduate student irrespective of the level of QIS staff input in shaping the idea into a product. QIS staff had to approach the enquiries of postgraduate students by first asking whether they were coursework higher degrees, which operate under the same guidelines as undergraduate coursework degrees, or whether they were students in a research-based higher degree. In a few cases where the potential product ideas clearly overlapped or derived from QUT research activities, higher degree students had to be referred back to the research groups after an explanation of the ownership issues.

A Problem with Intellectual Property

With the QIS attracting student visitors from across QUT who wanted to discuss their ideas and potential new ventures, the second biggest issue that arose during the life of the project revolved around IP protection. Concerns were raised by students about protection of their ideas in the QIS, either when discussing their ideas with QIS staff or when other students were present.

The most common concerns of students included: people stealing ideas, disclosure of patentable ideas, ownership of new ideas that emerge at QIS and how contribution from others impacts upon ownership. The challenge for the QIS was providing accurate IP knowledge, practical guidelines and an environment where students felt their ideas were safe, but also an environment conducive to collaboration, feedback and sharing.

While IP issues are a valid concern, and the skills and knowledge necessary to protect IP are essential for any entrepreneur, collaboration and feedback are also essential to the development and validation of early stage ideas and imperative to learning for the emerging entrepreneur. In some cases, secrecy can be a hindrance to the development of an idea depending on the technology, industry and business model. A balance must be found between too little and too much IP protection.

A number of potential solutions were trialled. The formality of signing non-disclosure agreements between QIS staff and student entrepreneurs had limited applicability. For adequate coverage, everyone attending a forum would have to sign a multitude of agreements and the situation would quickly become unworkable. A degree of trust is required.

To address these issues, QIS trialled a membership style of engagement that would address the IP concerns of students and would also serve to promote a sense of community. The membership agreement included a Code of Conduct Agreement that allowed visitors to participate in activities that involved disclosure and broader discussion of IP (i.e.,

brainstorming sessions, feedback sessions, idea development sessions). The Code was short (see Appendix A) and contained two key statements that addressed IP ownership and stated QIS stance on IP protection.

- *Members agree to take responsibility for the protection of their ideas and IP – consider a confidentiality agreement, talk to QIS' in house lawyer, get up-skilled and understand the IP issues relevant to your idea, technology or invention by attending the QIS Ideas and IP Workshop.*
- *Members agree to prevent disclosure of other members' ideas – disclosure of someone's technology can destroy their chance to patent or commercialise. It might be a cool idea, but respect that they have shared it with you in confidence. Put it in the vault.*

While the Code of Conduct was successful in clarifying common ambiguities and setting a framework around IP, the concept of a 'club' did not have meaningful uptake. Feedback from the students was that a 'club' model that required members to 'sign-up' did not add value and actually created more barriers to entry for new students.

To help students develop their understanding of IP and facilitate an appropriate IP protection strategy for their concept idea, one solution, thought not entirely fool-proof, was providing students free access to an IP attorney through the QIS as well as template non-disclosure agreements. Students met with the QIS mentor first and if their idea was sufficiently developed, an appointment was arranged with the IP attorney. In these instances, the formal process of identifying prior art provided both a sharp wake-up to the student entrepreneur as well as a framework for progression of the idea and development of an appropriate and effective IP strategy.

Students as Drivers of Activities

With limited human capital available, students themselves become an important driver of the activities; there are successful international exemplars where students run the EE entity. One notable example is the IDEA Venture Accelerator of Northeastern University in Boston (<www.northeastern.edu/idea/>; Collet, 2011) where the management team and the instructors comprise volunteer undergraduate students while Executive MBA students serve as mentors. Extensive use of student volunteers permits an extensive array of activities to be delivered under the oversight of a single senior academic funded by the faculty.

The approach adopted by Northeastern University does have one problem worth reflecting upon: high turnover of volunteers. The tenure of volunteer students was typically short: 12 months, as normal academic commitments took precedence over the extracurricular volunteer activities. The highly entrepreneurial nature of US society, in general, ensures a more entrepreneurially inclined undergraduate cohort, who see the value of the experience, to populate the IDEA teaching and learning framework. The problem for the Australian context, then, is the lower inclination towards entrepreneurialism, lower levels of self-confidence and also the mindset regarding receiving academic credit for an activity on a university campus.

From the perspective of developing skills, the QIS staff encouraged student development and ownership of activities. This worked well for short-term activities such as pitching practice, where students temporarily took over hosting roles as part of developing speaking skills, but was generally unsustainable for most other activities. Students felt that sustained commitments would impinge on their academic and work commitments, and in some cases deflect them from their entrepreneurial endeavours.

Losing Control of The Brand

Partnering with students, individually or in teams, did cause some interesting problems around the student usage of QUT-owned property beyond that sanctioned in the daily activities of the QIS. Such usage was difficult to police and was discovered more by serendipity than design. Nonetheless, the university does not consider ignorance an excuse for violation of its' property and precautions are needed.

The QIS hosted and sponsored student-run events; on a number of occasions these were associated with daylong programming competitions that involved broadly based audiences across the southeast Queensland region. In one instance, the students considered the association with the QIS as grounds to use QIS and QUT logos without referral of the distributed material to the QIS staff for approval. Furthermore, the logos of a high-profile west coast US University also featured on the promotional material. Apparently, the competition originated in the Californian-based university. This group of students presented other behaviours that were also of concern, including predatory behaviour around IP of other competition participants. As advice on proper procedures and etiquette failed, the eventual solution was to slowly ease the group of students out of participating in QIS activities and using QIS facilities.

A second example arose from a student who established a service-based company. The student used the QIS facilities and support to register the company, develop networks and install links from the QIS web site to the student company. Later examination of the student company web site, found the business address displayed on the home page was listed as QUT and included designations for the building and floor, and a QUT logo. The illusion presented to the outside world was that the student company was officially associated with QUT, as some QUT-owned spinout companies would appear. Common rooms accessed by students were serving as the company headquarters. In this case, the faculty enrolling the student (and apparently housing the company) contacted the student and removed all references to QUT.

Another issue that arose around control of the QIS image concerned volunteers hosting significant QIS activities. One example concerns a student who came to the QIS with proposition to take an established low-key activity and turn it into a high profile service activity. The high profile service was presented as a sales pitch with predicted outcomes around progression of new ventures. The price for the service would be an official title and recognition as QIS staff that could be included on the student's resume and business cards (including logos) to enhance employment prospects. The approach taken by the QIS was to offer retrospective recognition once the activity attained the promised high profile (expected within three months of a twelve month plan) with demonstrated outcomes. The

service did not eventuate and the proponent eventually drifted away.

Empowerment of the students to engage in entrepreneurial activities in association with the QIS mostly had high rewards, however, one unforeseen deficiency in our thinking and operations was how we maintained control of the QIS brand, and through that, the brand of QUT. Fortunately, issues around this aspect of the project, although difficult to resolve, were few.

What Resources To Provide?

Early in the QIS project, there was a concerted attempt to build a bank of resources for student consumption. The Entrepreneurs Starter Kit provides one example (See Appendix B) where QIS staff attempted to build an introductory manual for students coming to the QIS with an idea.

For the Entrepreneurs Starter Kit, the problems were myriad:

1. No document adequately addressed every student's needs.
2. The document reflected a narrow (traditional) perception of what a business could be or come to be.
3. The document had to continually be revised as deficiencies in knowledge of students became apparent.
4. The scope of the creativity, innovation and commercialisation pipeline is very broad and any document that attempted to provide an overview of helpful resources, critical questions and insightful hints ballooned out very quickly.
5. Students regarded the (any) document as a restrictive form.
6. Resources (books, web sites) and services (programs) were evolving at rapid rate with new books and web sites proliferating at a time that Australian-based private and government agencies were curtailing activities. Many new books, although broad in scope and international in perspective, still provided a better overview than any that could be drawn up and maintained as relevant by QIS staff.
7. Approaches to the innovation pipeline (from incubator to co-working) were changing.
8. The innovation ecosystem was also rapidly evolving (see Chapter 8) and thus the networking environment was in a constant state of flux.

Many attempts to provide resource documents suffered the same problem: they were obsolete quickly, mostly irrelevant for the particular needs of the individual student and over-shadowed by new (external) resources becoming available. The generation of certain documents for distribution to students became an unprofitable time sink and it was more efficient to direct students to the particular resources, intrinsic to QIS or of an extrinsic nature, that were applicable to their own requirements.

What did evolve from attempting to develop resources for emerging entrepreneurs was a general process that served to introduce a new student to the entrepreneurship perspective

and orientate them in the product development process. This framework became embedded in the mentor program, rather than a manual, and involved the following four general steps, which were adjusted depending on the students understanding and stage in the product development process:

1. What are your personal goals – why do you care about this project?
2. Do you understand the product development process – where are you now in that process?
3. Have you clearly identified the value proposition, commercial opportunity and customer – Does someone else care? Who?
4. How do you know someone else cares enough to pay for this product, service or technology? – Building a minimum viable product & testing.

From these four questions, the Entrepreneur's Starter Kit itself evolved from a static list of resources and inspirational material, to a collection of action-focused activities that helped students answer these preliminary questions.

Busy Days, Slow Days

The QIS began with a five-day a week operating schedule, which was entirely appropriate during the implementation phase. Towards the end of the project, a three-day working week could capture 90% of the student drop-in visits, as these activities were generally associated with other events (workshops, seminars, etc.). The QIS employed part-time staff only, on casual rates and short-term contracts to ensure a flexible and frugal approach in delivering its product. Over the course of the project, it became more efficient to schedule all planned activities over three days per week. On the two-days, when the casual staff were absent from the QIS, student groups were found to be very actively using the meeting spaces. Furthermore, *ad hoc* visits by interested students on such days would be handled by the student regulars who would introduce the QIS and encourage the visitor to come back on an event day.

The Bottleneck of ICT Skills

With social media and web-based delivery dominating in modern society, the most common skills required for progression of student concepts products to a prototype were ICT skills. Even so, non-ICT based companies and products still required a web, Facebook and Twitter presence. Free web design sites (e.g., Wordpress) provided basic frameworks that allowed projects of student companies to achieve some level of basic web presence, similarly a presence on Facebook and Twitter can be achieved with minimal skills. Many student proposals, however, revolved around web-based service companies and apps functioning on multiple mobile platforms (Google's Android, Apple's iOS, Microsoft's Windows, etc.) that required a higher level of programming skills.

For the QIS, the higher-level ICT skills requirements represented a huge bottleneck in concept progression. This had impacts on students returning to the QIS. The problem could not be easily addressed and one the QIS never solved for itself. It did not help that a common misconception is that programming is a simple task and a mobile application

interface can be achieved with minimal effort, overnight; that is far from the truth.

The explosion of the social media, the gaming industry and mobile application programs over the last few years resulted in a scarcity of available talent. Second year IT students could (and still can) attract $200 - $300 per hour payment for contract work. As a consequence, IT students were, by-and-large, not interested in the QIS as a vehicle for furthering careers and sharing skills. Nor were IT academics, for a variety of reasons that included their own commercially focused endeavours and consultancies, and other academic teaching and research commitments. Understandably, the IT community were/are focused on a booming market for their talents.

The QIS explored the possibility of investing in IT expertise. The nature of programming across multiple platforms, of meeting company-specific requirements around service delivery and the input required to even reach a working prototype product meant that the approach was financially unviable.

The partnership with River City Labs, with focus on IT start-ups, provided an opportunity to transition the ventures into an environment where concept products could be developed further.

Chapter 8 – The Changing Innovation Landscape

The innovation and entrepreneurship landscape changed substantively in Brisbane across 2011 and 2012, and continues to evolve through 2013. These changes are a consequence of the impacts of the global financial crisis, the re-structuring of many government-supported innovation and start-up programs, Australia catching up to the USA-led trend of co-working and 'light touch' incubators, and the opportunities this different business model presents.

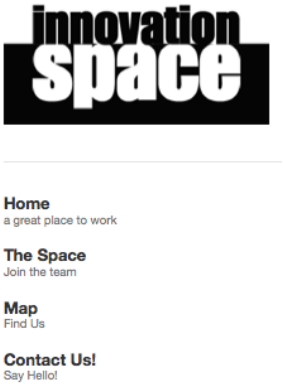
Innovation communities and firms have sprung up across Brisbane city over the last two years – funded by corporations, city council, government and private entities. A brief description of some of the evolving landscape follows.

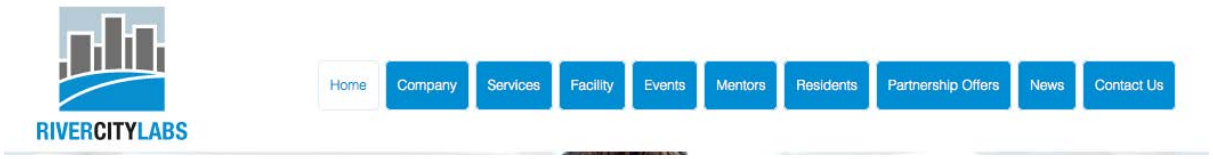
The State Government ran two incubator facilities in Brisbane: **iLab** <www.ilab.com.au> in Toowong, and the Brisbane Technology Park in Eight Mile Plains. The former was a traditional incubator (or accelerator) for small startups while the latter houses more established operations with an opportunity for manufacturing. In 2011, iLab was sold to UniQuest <www.uniquest.com.au> and later moved from their Toowong offices to the old Long Pocket Laboratories in Meiers Road, Indooroopilly. UniQuest is affiliated with, and a subsidiary of, the University of Queensland. In 2012, iLab restructured their operations, rebuilt their staff profile and redeveloped their business model, but they remain a business incubator. The iLab product now incorporates seminars, bootcamps and workshops, coaching, training and mentoring services, seed funding and competitive grants that target a broader client base of early stage entrepreneurs including student entrepreneurs.

The Queensland Government also had a significant stake in the Australian Institute of Commercialisation (AIC, <www.ausic.com>), a major sponsor of the QIS, based at Brisbane Technology Park. The AIC began as a Brisbane-based innovation consultancy firm targeting commercialisation courses, coaching, advisory services (e.g., market research) and networking activities to high-technology SMEs and start-up companies. Through 2010 and 2011, the AIC endeavoured to become a national consultancy organisation with offices opening in Melbourne and Adelaide. The AIC expanded its product range in innovation consultancy and advisory services and courses. In late 2011, as part of the state government rationalisation of its businesses, the AIC was merged into QMI Solutions, an entity owned by the State Government, The University of Queensland and QUT. The merger provided the Queensland Manufacturing Institute with the 'capability to work with entrepreneurs, businesses, research organisations and governments to convert ideas or

intellectual property into successful business outcomes'. A re-structured AIC returned its focus towards the entrepreneurial community in Queensland and boosted its services and offerings to that community.

A significant trend over the last two years has seen the traditional incubator or industry park facility give way to more innovative and flexible approaches to conducting business around new ventures. This trend accompanies the evolving 'co-working' movement where individuals share working spaces and skills but work independently on projects. Often, in such instances, random co-working events ('jellies') evolve into more stable co-working communities or cooperatives that foster networking and extensive sharing of skills and services. New ventures, such as the Innovation Space <innovationspace.com.au> located in Frenchs Forest (Sydney), base their business model around serving these co-working cooperatives. Thirteen co-working centres opened in Melbourne in 2012; three opened in Sydney. Brisbane has its share of innovative approaches.





River City Labs (RCL) <www.rivercitylabs.net> is an example where an IT entrepreneur built a non-for-profit tech focused start-up co-working space in Fortitude Valley. In its relatively short life, RCL evolved from being exclusively IT, mobile and Internet focused to embracing a broader definition of 'tech start-up' to include any internet based business including gaming. Many RCL activities cross over with the QIS. RCL offers activities both exclusively for its members as well as for the general public. The QIS has partnered with RCL in presenting activities and providing opportunities for entrepreneurial students to be immersed in the Brisbane start-up community.

Josephmark <Whoisjosephmark>, a new media entrepreneurial business and creative consultancy initiated their own co-working space on the ground floor of their three-storey building on Petrie Terrace in Brisbane. A founder of Josephmark (Ben Johnston) has provided interactive seminars in QIS workshops. Josephmark have pioneered new business models for multimedia start-ups that attracted new clients like Sony and MySpace and earned them multi-million dollar contracts.

HackerSpaceBrisbane (HSBNE, <www.hsbne.org>) is Australia's first Hackerspace. Hackerspaces take co-working to another level with workshops and classes offered to facilitate collaboration and knowledge sharing. Situated in a once-disused factory in Eagle Farm, the Brisbane arm of this global movement is one of the largest in the world and features engineering workshops that serve as prototyping facilities. As the web site extols: the HSBNE allows people from all walks of life to learn, collaborate and build amazing things and welcomes anyone from the inventor, the small business to the weekend tinkerer. Opening in December 2012, HSBNE is the most recent community based innovation learning space in Brisbane.

HSBNE
HackerSpaceBrisbane

Cafes looking for alternate business plans have adopted the notion of co-working spaces. The **Ideation Café** (<www.ideationcafe.com>) is one example of a hybridised café/co-working space where facilities, such as studios, boardrooms, tables and desks are rented out on an hourly, weekly or monthly basis along with discounted coffees and catering.

With an increased interest in innovation and entrepreneurship over the recent years (post GFC), the Brisbane chapter of the **Australian Innovation Festival** has grown from a small endeavour to a major activity in the Brisbane region <www.ausinnovation.org/festivals/australian-innovation-festival>.

AUSTRALIAN INNOVATION FESTIVAL

The **Microsoft Innovation Centre** opened on the 18th floor of an office block in the Brisbane central business district (400 George Street) in mid 2011 <www.startupsmart.com.au>. The Centre has sought to attract emerging IT entrepreneurs. Since its inception, as outlined previously, the MIC has worked with the QIS to develop competitions and programs that target early stage IT entrepreneurs.

The Edge aims to provide the opportunity and inspiration to explore creativity across the arts, technology, science and enterprise <www.edgeqld.org.au>. Based at the State Library of Queensland (Southbank, Brisbane), and funded by the Queensland State Government, the

SL The Edge
ABOUT
PROGRAMS
CALENDAR
BOOK
Exploring creativity

Edge focuses on the interface between creativity and technology and runs a broad spectrum of introductory workshops on up-skilling in this space (e.g., introduction to electronics, sound recording, photoshop, etc). Commencing operations in early 2011, the Edge promotes itself as a re-imaging of libraries for the next generation.

Creative Enterprise Australia (CEA) is an incubator owned by QUT that focuses on new ventures in the creative and multimedia industries. Whereas in the past, CEA took a traditional business incubation approach to new ventures attracting mostly external entities, in 2012 they began to include student entrepreneurs in their target client base and to diversify their activities to include hosting and co-hosting events such as weekend start-up bootcamps for multimedia and software design.

The re-structuring of government departments, post change of government, as well as the contraction of the industry and government infrastructure around innovation and commercialisation also led to significant job losses across the 'innovation' sector. In turn, there was a proliferation of consultants and service firms targeting the areas of innovation, entrepreneurship and commercialisation in Brisbane. [What does a redundant public servant do, other than become a consultant? The same can be asked of the CEOs of the many high technology start-up firms that went to the wall, post-GFC.] The QIS was well visited by new consultants seeking to offer services, at a fee, to help promote QIS objectives. The consultants also entered the networking communities seeking business opportunities (i.e., clients). The plethora of new 'innovation specialists' and 'business coaches', as well as re-invigorated activity from some firms such as the AIC and iLab, created extra competition in innovation landscape, including for QIS partner firms such as Edgeware. Further strain was placed on the QIS – Edgeware partnership by the reduction of government funding to Queensland TAFEs who underwrote the delivery of Edgeware's business development courses.

With all these activities, the last two years has seen what was a dearth of innovation and entrepreneurship activities for the general (including student) community turn into a flood of competing interests and entities. Furthermore, requests for sponsorship of activities have increased with competing entities vying for a limited amount of funds at the same time that the pool of available funds has decreased since the GFC began.

The upside of the evolving landscape is that the innovation ecosystem has expanded significantly in Brisbane, the conservative approaches to new venture incubation are being supplanted and more support systems are being implemented, for profit and not-for-profit.

Chapter 9 – Impact Of, and On, the QIS

As well as a rapidly evolving innovation landscape in the Brisbane region (Chapter 8), the QIS project was influenced by events occurring at QUT over the two years (2011 – 2012).

Institutional Change and Competing Performance Indicators

Like many Australian universities, QUT has undertaken substantial structural reorganisation over the last three years: eight faculties have become six and schools have moved between faculties. With reorganisation and a new strategic plan (QUT Blueprint3) came increased performance requirements for faculties around student, community and industry engagement. The increased performance expectations around engagement activities saw faculties, understandably, concentrate on their own performance requirements and build capacity within their own faculties. People from a number of faculties visited the QIS to learn about our approaches. These were subsequently duplicated within individual faculties. Faculties focussed on running their own competitions, challenges, activities and events; even when some of these were conducted with QIS partnership in the past. Whether competing activities developed by faculties aided to raising the awareness about entrepreneurship as a career pathway is unknown.

Faculty restructures also highlighted the need for higher-level support for broadly based programs like the QIS. The QIS started life in the Faculty of Science and Technology (FaST) with an Executive Dean who understood and championed, and indeed underwrote, the project activities. At the end of 2011, the QIS moved to the Faculty of Health (FoH) as a consequence of the project leader's substantive transfer into a new school. With the transfer to the FoH, there came a need to raise awareness of this extensive L&T project and its requirements, mostly around space, staff support and a low level of financial commitment, with senior management of the new faculty. Faculty re-structures, and the need to rebuild relationships and processes, deflected the focus of the QIS and its staff. The move to the FoH, head-quartered as it is on another campus, did limit the exposure to the technology-based disciplines more attuned to commercialisation of innovation.

Another development was the implementation of a university initiative that overlapped the QIS project and its objectives. In 2012, the Leadership Development and Innovation (LDI) Program <www.student.qut.edu.au/studying/student-life/get-involved/leadership-and-development> operating out of QUT Careers and Development began building a series of events to be launched in 2013. Programs in the LDI would overlap with QIS activities around skills development; for example: public speaking, pitching, creativity, creative thinking, networking, mentoring, intellectual property considerations and challenge competitions (see Fig. 9.1 below for the LDI program activities). The LDI program also planned to target the extra-curricular space. The target audience of the LDI initiative is, however, much broader than the QIS.

Skills related to entrepreneurship *per se* were not initially overtly addressed in the LDI program; however, this was to change in 2013 when the program launched.

Welcome to the LDI Program!

The Leadership, Development & Innovation program aims to help students develop their leadership skills, contribute positively to the campus community and to the university experience of others, and bring their innovative ideas to life.

The program's aims are twofold:

1) To facilitate holistic learning experiences that help develop highly skilled and well-rounded graduates who are able to begin their careers with a wealth of leadership knowledge, skills and experiences.

2) To build a vibrant culture of student leadership, volunteerism, and involvement at QUT, making the university experience a rich and diverse one that extends far beyond the classroom space.

The LDI program offers unique experiences such as ***workshops*** and skill ***incubators***, and also recognises the many ways you are already contributing to the QUT community, through ***campus clubs***, ***volunteer positions***, and ***student governments***. The program can also support you in beginning ***your own project or initiative*** so that you can enact positive change in the community and leave a lasting legacy from your time at QUT.

Finally, the LDI Program has a comprehensive and customizable ***recognition*** and ***awards*** system that enables program participants to be formally recognised for the leadership contributions they make to the QUT community.

Read on to learn more!

Navigating LDI: *Click the following links to learn more about the program:*

1) How LDI Works
   - *Learn-Act-Lead Model*
   - *Strands of Leadership*
2) Building your LDI experience
   - *Core Competencies*
   - *Learn Sessions*
   - *Act Contributions*
   - *Lead Positions & LDI Mentors*
3) Previous Experience and Validation
4) Awards & Recognition
5) Get Involved with LDI!

LDI Workshops & Sessions Offerings for 2013

Published 15 February 2013 @ 03:44 PM, by Jimi Bursaw

LDI Learn Sessions: 2013 Offerings

Leadership Development & Innovation Program
2013 Session Topics

Organisational & Community Leadership	Peak Performance & Personal Excellence	Social Change
Change Management	Becoming a Human Calculator	Beyond Recycling Your Cup
Group Decision Making & Consensus Building	Creativity, Thinking & Creative Thinking	Disability Experience Challenge
Initiative Task/Teambuilding Masterclass	High-Performance Memory	Making Change in an Overwhelming World
Motivating Teams	Impromptu Speaking	Eco-Justice
Neuro-Linguistic Programming	Intellectual Property	Empowerment & Oppression
Problem Solving	Interviewing Skills	From Charity to Social Justice
Running Effective Meetings	Mindfulness Training	Kinds of Citizenship
Small Group/Team Dynamics	Selling Yourself, your message and wares	Lenses, Backpacks & Rulers – Working with
Student Organizations Interest Sessions*	SLAM Poetry Workshop	Moving from outsider to insider
Team Building	Speed Reading	NGOs 101
Team Communication	Stand-Up Comedy Workshop	Non-Violent Action
Team Governance	The Perfect Resume	Servant Leadership 101
The Evolution of Leadership	Time Management	Social Change Theory
Visioning	Visual Thinking	Volunteering 101

Student Organizations Interest Sessions*
Budget Management*
Event Management*
Marketing & Promotions*
Proposal Writing*
Sponsorship & Funding*
Succession & Sustainability*
Team Management Skills*

Core Competencies
Emotional Intelligence
Intercultural Competence
Leadership Foundations
Listening & Speaking
UniCraft

Figure 9.1 – The LDI web page showing the planned scope of (early) activities.

Embedding the QIS Activities at QUT

Throughout the latter four months of 2012 and the first five months of 2013, the QIS collaborated directly with the student engagement personnel of Student Support Services in the development of the LDI program, sharing key insights, lessons, experiences and teaching resources to embed QIS activities into the university-wide initiative.

The LDI program was launched Semester 1, 2013.

QIS activities incorporated into the LDI program include:

- Creativity, Thinking and Creative Thinking workshops.
- IP & Ideas seminars.
- Story of a Startup seminar series.
- Pitching Practice Workshops Series.
- Brisbane Student Start-Up Night (see advertising flyer below).
- Pitching Competitions.
- Peer Mentoring Program.
- Making Ideas Happen: The Action Method (new approach to mentoring outlined in Appendix D2).

Many of the activities address instilling enterprising and early-stage entrepreneurial skills. Although the LDI organisers did not initially conceive of addressing entrepreneurship *per se*, a student volunteer, who undertook the QIS/MIC/RCL event in late 2012, approached the LDI staff with the proposition of building the Brisbane Student Start-Up Night into the LDI program of events. With the help of QIS staff, the student organised and presented the LDI version of the Start Up Night event.

The plan to build an innovation community and a change maker incubation program has been directly influenced by the experiences of the QIS project and it's activities.. As the LDI Coordinator advises in an e-mail (May 2013), the university initiative plans to build an LDI innovation community *building on the QIS community* and of the need to take *lessons learned from the QIS project around building a new mentorship & incubation model to test & run in LDI as part of changemakers/innovation elements.*

In addition to the embedding QIS activities in its' own repertoire of offerings, the LDI program is currently integrating details of the QIS mentors, partners, facilitators, speakers, industry contacts, distribution lists and student contacts. Visitors to the QIS website are now re-directed to the LDI web site and QIS e-mails directed people to the LDI program (see Fig. 9.4).

If the question around the outcomes of the QIS is: what steps are being undertaken to embed project activities in the university learning and teaching activities?

The response would have to be that the activities have already been embedded in university-level QUT learning and teaching activities targeted at the extra-curricular space.

Figure 9.2 – Promotional material showing the Brisbane Student Start-Up Night now being offered by the QUT LDI program.

Awesome people with kickass ideas, we want you! View this email in your browser

Got a kickass idea or Startup? Show us!

Brisbane Student Startup Night and Pitching Competition - Thurs May 16

Got a kickass idea that could make a great business? A uni assignment that has legs? Thinking about creating a start-up? Working on a start-up at the moment?

The QUT Leadership, Development and Innovation Program and Flagship Campus Life Program have joined forces to bring you the Brisbane Student Startup Night!

Network with industry and your entrepreneurial peers across a variety of disciplines as we judge the finalists of a startup pitching competition.

To win, it's simple, you have to convince the judges that your idea is the best and most viable.

The Event

Where: Rooftop Terrace & The Atrium, Level Six, P Block, QUT Gardens Point Campus

5pm - Semi-Finals

Students pitch to a panel of student entrepreneurs.

Industry and peers network and enjoy live music and catering.

6pm - Finals

The top 10 pitch to the entire audience, judged by industry.

The winner is announced and there is a panel discussion/Q&A.

7pm - Event Close

Entry Categories

1. New Ideas
2. Existing Startups

Apply to pitch at http://www.f6s.com/brisbanestudentstartupnight

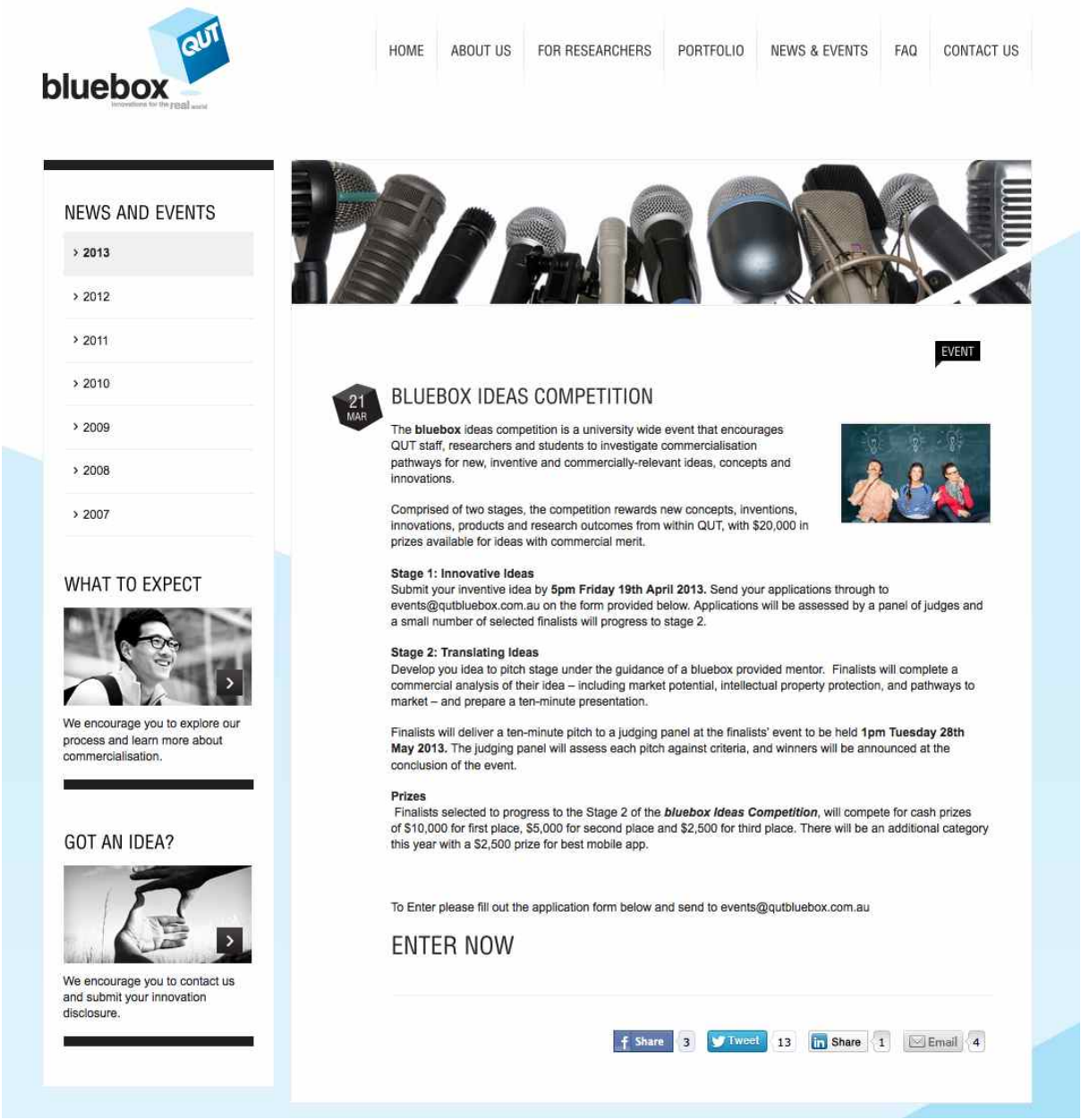
Applications close Sunday 12 May!

If you're not entering but still wish to come and join us in two of QUT's awesome new spaces, The Atrium and the rooftop Garden Terrace, RSVP here!

More Information: engage@qut.edu.au

QIS activities were also embedded in other areas of QUT's endeavours. QUT Bluebox is the commercialisation arm of QUT and focuses on the technology-centric innovation and commercialisation pipeline and in 2013 they began a pitching competition, in this instance targeted at technology based initiatives.

Figure 9.3 –QUT Bluebox advertises an 'ideas competition' in 2013.



What Students Say About the QIS

The aim of the QIS was to instil an entrepreneurial mindset in students. Ultimately, it is how the student end-users of the QIS rated their experiences that reflect whether the QIS was a success or not.

The following comments about the QIS were collected at the end of 2012 from student end-users that have featured in this report as well as two others who hang out in the QIS.

Vignettes of experiences of Mitchell Cox and Michael Larkins are presented in Appendix F.

Michael Larkins
[Physics PhD Candidate]

> *For me QIS has been successful in cultivating an entrepreneurial mindset, which I interpreted as its primary goal. I have several projects running concurrently outside of my PhD work (one already turning a profit), and the skills learnt are largely complementary to my research. I believe the true potential of a program like QIS would only be realized if it was to continue for several more years, so people like myself who have benefited from it could contribute back their experience.*

Mitchell Cox
[3rd year bioscience student]
(Developed Vertic Education - a subscription based online science education platform for high schools).

> *If QIS wasn't here I wouldn't have been able to develop Vertic Education from an idea to a revenue generating business. For students such as myself, who are not studying a business degree, it is impossible to know where to look for valid information and knowledge. There is so much information available that for the novice it is impossible to navigate. I really believe that my business is going to be something and make a difference to education in high schools.*

Clinton Kerrison
[A non-university person who returned to study at QUT after discovering the QUT Innovation Space. Used the space to develop his Android app called QRailDroid.]

> *The Innovation Space provided me with the most valuable business contacts I have acquired since moving to Brisbane. The staff and other participants in the space were instrumental in the design and development of my first mobile software product and continue to remain an effective sounding board for ideas and concepts. The opportunity to contribute to other participants' concepts has proven equally valuable.*

Zac Van Haaften
[1st year Business Student, hangs out in the QIS engaging in various activities]

> *The QUT Innovation Space is an awesome place to discover and investigate. Everything I do there I find extremely valuable and rewarding, from talks given by entrepreneurs at all different stages of their journeys, pitching practice, co-working jellies, and just having really interesting chats with the people who work there. It's a great place to meet people and network with like-minded big thinkers, and bounce your ideas off other people, give them advice on their ideas and let their unique experiences and knowledge help you to grow your own ideas and knowledge. The space is fun, energetic and creative and this is the environment where great ideas are born and nurtured.*

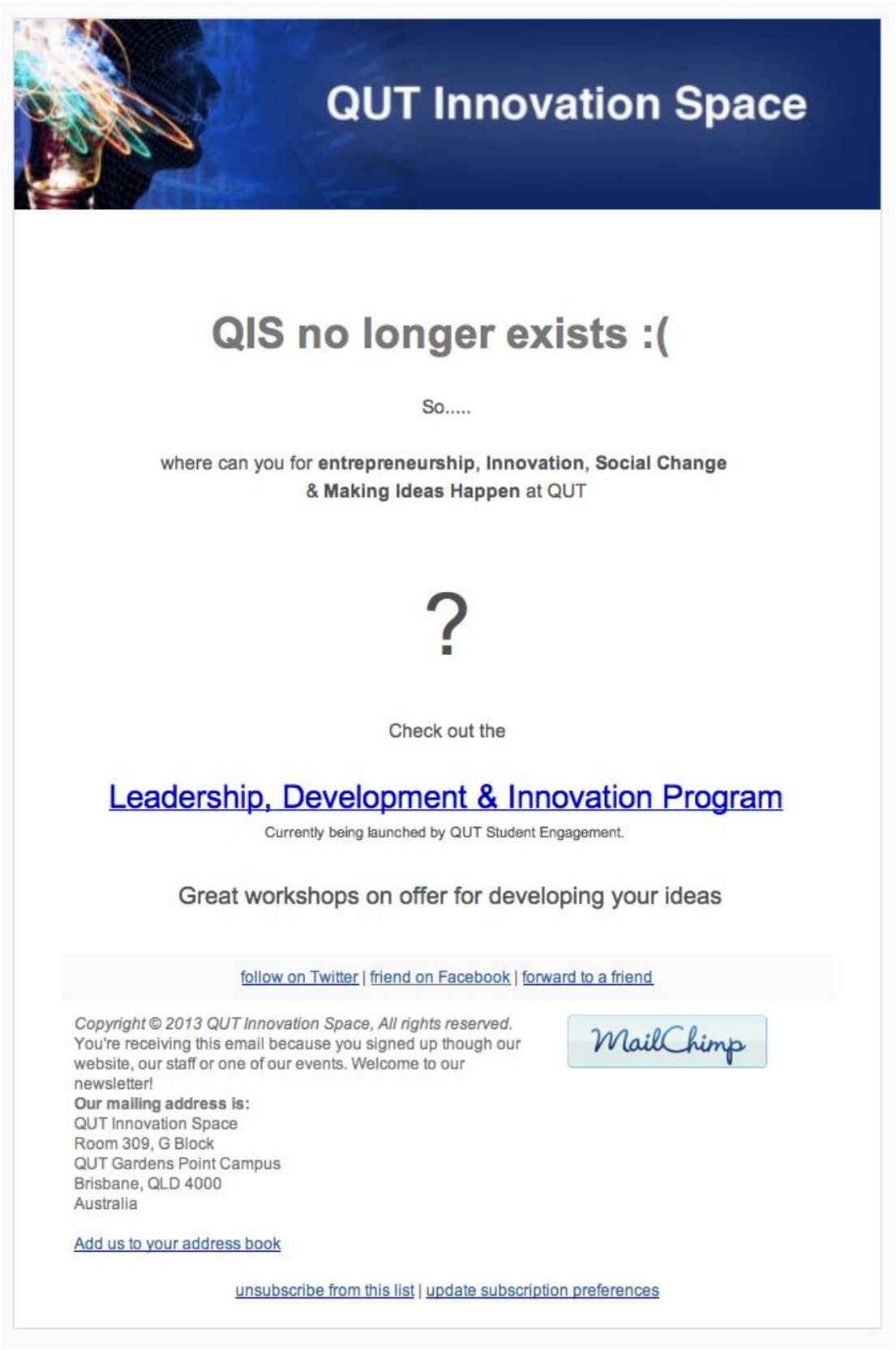
Tim Sheehan
[QUT alumni, then mature age law student, patented a medical technology after talking to QIS staff]

> *I found the Innovation Space to be a welcoming community of like-minded entrepreneurs. Not only do they share my interest in whacky ways to make money, they encourage it! The workshops are also lots of fun. I learnt more than I had expected and met some great friends too.*

Ashley Keys
[3rd year science student, hangs out in the QIS engaging in various activities]

> *The QUT Innovation Space (QIS) has provided me with the opportunity to learn about the effective development of ideas and how to put them into action. The helpful team at QIS have provided me with the support to set up my own events and the encouragement to participate in their activities. I would strongly suggest visiting QIS to any budding or established entrepreneurs.*

Figure 9.4 – The QIS web site now directs visitors to the new LDI program where they find the QIS activities now embedded in a university-wide initiative. The following e-mail to the QIS distribution list announced the transition of the QIS into the LDI program.



Chapter 10 – Lessons, Reflections and a Bit of Theory

Lessons

Along the journey that was the two-year QIS project, a few lessons were learned that should shape further approaches to developing L&T initiatives in EE in the Australian university landscape:

1. As discussed in further detail below, the target audience of the EE initiative needs to be carefully assessed. The greatest demand for training offered by the QIS was not for entrepreneurship but rather for developing enterprising skills and the antecedents of entrepreneurial intent. These two learning approaches require different training regimes (Fayolle and Gailly, 2008).
2. In the Australian tertiary landscape, where students favour activities that confer course credit, an extra-curricular program of activities can be sustained.
3. A three-dimensional approach is required for successful operations: a physical space provides credibility as well as a home for those seeking like-minded individuals, a virtual space underpins networking and advertising, and a network of mentors and partners brings the experiential reality of the real world to the initiative.
4. The QIS client base extended well beyond the QUT student population to include students from other Brisbane-based universities and, more frequently, the general public also seeking an entrepreneurial haven. Thus, a broad demographic of end-users will accumulate with needs to be addressed and this requires resources.
5. Discovery by students (and others) and ease of access to information was important for viability of QIS activities and advertising became an essential on going activity. An important element of visibility involved using IT services, including a web site, external to the university. As a Chancellery initiative, even the LDI program has a URL that makes *discovery* difficult.
6. Students' expectations of a simple linear pathway from an initial concept to a billion-dollar product are the largest initial hurdle to overcome.
7. The nature, number and breadth of activities to be delivered necessitate the building of mutually beneficial relationships with external partners at all levels of operation. The relationship with Edgeware, for example, was a type that would not normally develop in a university environment.
8. Students expected a suite of offerings that were relevant to their needs, dynamic and challenging. All QIS activities were subjected to continuous review and re-design, building on formal and informal feedback from the student end-users. The QIS experimented heavily.
9. QIS activities had to be simple and delivered over relatively short-time frames to maximise attendance and impact. The more complex the activity, the more difficult to deliver and the less student engagement. The scheduling of activities also heeded this principle.
10. The most popular activities addressed intellectual property considerations and a

large part of continuing student engagement with the QIS revolved around addressing these issues early in the experience.

11. The major bottleneck faced in progressing concepts through to prototyping was the dearth of IT and programming skills and resources. The QIS was unable to resolve the issue in this area of high demand.
12. The provision of documented resource materials became a futile exercise in the face of constant change in the demands of students and the ever-increasing, freely available or relatively cheap, literature that more fully addressed those needs.
13. Perceptions of faculty ownership and competition were simple everyday facts of life for the QIS, a bottom-up initiative in EE. These instances served to hinder the building of relationships across the university and even between universities. Nonetheless, such attitudes were equally matched by the boundless generosity of others.
14. The innovation and commercialisation pipeline is a continuum that spans creativity through innovation to product release into the marketplace. Training needs change along the path as would-be entrepreneurs discover their motivations, conceive products, develop their experiential skills and amass the infrastructure to move a prototype to a market-ready product. One small entity cannot adequately address the entire pathway but they can nudge students along it. The training environment needs to have entry and exit points.

Conclusions

This report serves two purposes. First, as an account of the QUT Innovation Space project and its evolution across two years, the report serves to identify the nature of student demand for skills as well as barriers and facilitators of the activities that promote EE in a tertiary education institute in the Australian context. Second, the report serves as a how-to manual, in the tradition of many tomes on entrepreneurship education (Appendix H), and describes the activities that worked as well as those that failed. Not all failures are described herein; many small activities were short-lived. A clear message to come from the project is the need to experiment.

The QIS *successfully* developed, implemented and delivered a collection of skills training activities (events, workshops, seminars and services) that targeted emerging entrepreneurs and (even) facilitated progression and incubation of new ventures into the marketplace.

That the word *successful* can be applied to the outcomes of the project, rather than subjectively claimed, derives directly from two points. First, and as demonstrated in provided examples, the QIS developed training approaches that changed the lives of emerging entrepreneurs enrolled as QUT students. Furthermore, the QIS also honed the level of enterprising skills in students who did not necessarily have a business proposition, at the time. Second, successful outcomes are evidenced as the embedding of most, perhaps all, of the QIS activities in a new Chancellery-sponsored initiative being implemented at QUT: the Leadership Development and Innovation Program hosted by Student Support Services. As the LDI program evolves, further elements of the QIS project are being embedded in the LDI initiative. Funding for the LDI program derives directly from the

Student Service Fees collected by QUT. QIS staff worked with the LDI programs across the last four months of 2012 and the first five months of 2013 to transition the activities.

In many ways, the QIS is its' own Story of a Start-Up (see Epilogue).

Although reborn under a new banner owned by a different entity, the QIS project ultimately achieved its goal of creating and embedding a university-wide program that operated across disciplinary boundaries to instil skills of increasing relevance not just to entrepreneurial careers, but also to any career in today's current global business landscape.

The entrepreneurial skills targeted for training by the QIS are also the employability skills now demanded by industry (Harvey, 2001, 2003; Casner-Lotto & Barrington, 2006; Moreland, 2007; Skills Australia, 2011; NA, 2007, 2010; NACE, 2011; Whitefoot & Olson, 2012, NIH, 2012). In the workplace environment, knowledge-intensive industries have become flatter in structure, more collaborative and service-focused. The major emphasis on discipline-specific knowledge of a few decades ago, and still favoured in the academic teaching environment, has been supplanted in industry by a realisation that well developed interpersonal and intrapersonal skills are just as important as technical skills (Casner-Lotto & Barrington, 2006; Saflund, 2007; NACE, 2011). Industry representatives believe that it is easier to up-skill someone technically than it is to teach the necessary interpersonal and intrapersonal skills for workplace practice and career success (Saflund, 2007). The QIS became an L&T initiative that delivered training in interpersonal and intrapersonal skills.

The convergence of the realms of employability and entrepreneurship is simple recognition that skills underlying entrepreneurial activity, such as risk-taking, opportunity recognition, action-orientation, drive to succeed, effective communication (Gartner & Vesper, 1994), are important for career success of the individual (Gibb, 2002; NIH, 2012; Whitefoot & Olson, 2012; West, 2012; Office of Chief Scientist, 2013) as well as business growth through innovation that is both systemic and sustainable (Christensen, 1997; Gibb, 2002).

It is very clear that there is an underlying spirit of entrepreneurialism that pervades the university environment: students who 'want to have a go', to 'try something different'. The so inclined students feel isolated and un-supported. They are not engaging with the university. Said students also have an immeasurable passion for their perceived career trajectory. Such passion can be harnessed and focused through activities and entities such as the QIS (and the new QUT LDI program) with impacts on levels of student engagement.

Ownership of the LDI program by Chancellery is fundamental to the long-term sustainability of any initiative that aims to create a university-wide platform instilling skills core to entrepreneurial careers and to graduate employability. Perceptions of competition amongst faculties, in seeking to address their own performance indicators, was a constant fact of life for the QIS that impinged on relationship building across the university landscape. That said, there were also countless examples of generosity from staff who devoted endless amounts of their time, networks and contacts to further the aims and outcomes of the QIS.

As highlighted throughout this Final Report on the QIS project, initial assumptions regarding the target audience and the level of skills training to be delivered by this L&T initiative were

fundamentally flawed.

The biggest lesson is that, in the Australian university landscape, the greatest student demand is for the basic enterprising skills that may also lead to entrepreneurial success. The emphasis on skills training at the early stages of the creativity, innovation and entrepreneurship continuum may merely reflect the difference between two societies; the US is generally recognised as being more entrepreneurially inclined than the Australian (or EU) society. The initial stage-gated incubator model designed for the QIS drew upon a model common in the USA, and found to a much lesser degree in the EU (Collet, 2011).

Training should firstly focus on the underlying personal motivation and goals that drive the student (person) to be an entrepreneur (or wanting to try something different). Once the personal motivations are expressed, the creative elements can proceed through new product development process, defining the value proposition and on to the minimum viable product and prototyping. The pathway may never be truly linear, but at least the passage from ideas to a product, with mentoring, will be easier to plot.

Whereas programs that target new venture creation and incubation have high profile outcomes that are easier to measure in accountability exercises, they nonetheless miss the areas of greatest need. Given that even the new approach to 'light-touch' incubators (such as RCL, iLab, CEA) are struggling to find businesses that are ready to be incubated, there is ample argument that attention needs to focus, not on student concepts with a high likelihood of success, but rather on skill development in the earlier stages of the continuum.

The QIS evolved to occupy this early-stage space and deliver to a larger cohort of students and the outcomes validate the evolutionary change to meet the student demand. The QUT LDI program continues those efforts. The primary intent is to raise the entrepreneurial capacity of the broader student population. The outcomes, for mainstream business, industry and the regional economic landscape, will only become evident some years later.

Fayolle and Gailly (2008) describe different teaching models for EE and how these lead to three processes that distinguish between learning for enterprising skills, learning to become an entrepreneur and learning to research and teach entrepreneurship. The key differences between learning enterprising skills and learning to be an entrepreneur relate to the mindset of the individual. Fayolle and Gailly (2008) describe the process of learning to become an entrepreneur as addressing a professional dimension where the learning is more practically focussed on particular entrepreneurial situations: the *how, what* and *who*. In this instance, the situational learning deals with *how* to react to an entrepreneurial situation, *what* is required in that situation and *who* are the appropriate people (networks, contacts) to enable or progress the situation. Learning for enterprising skills, on the other hand, is described as a spiritual dimension centred on a voyage of self-discovery around entrepreneurial intent, orientation and self-efficacy: the *why* and *when*. The key learning outcomes of the spiritual dimension relate to knowing the values, attitudes, motivation of 'wanting to do something different' and knowing the appropriate time for the individual to engage in the entrepreneurship process as part of their personal life endeavours.

Fayolle and Gailly (2008) also propose that *the selection of the pedagogical methods for*

each entrepreneurship course should rely upon their adequacy and a priori efficiency regarding the objectives, the audience characteristics, the contents and the constraints due to the institutional context.

Although the initial scoping of the QIS project deemed that the professional dimension as described by Fayolle and Gailly (2008) was appropriate (and novel), in an Australian university context the greatest demand for entrepreneurship education appears to relate to the spiritual dimension and the voyage of self-discovery for students yet to fully realise their entrepreneurial leanings. Both the understanding of the needs and how best to address those needs, at the right level of delivery, in the undergraduate student population has been the most important outcomes of the QIS project.

In the university landscape, there is a lesser, but nonetheless healthy, need for a 'light-touch' incubation approach for potential new ventures in the university environment. The reasons for having an incubator program are manifold. Obviously, the occasional high profile outcome provides immediate validation, internal and external, for teaching the skills in the first place.

Most importantly, however, a university environment is the only place that can afford to experiment with, and research, the innovation pipeline, if for no other reason than the traditional business incubator model has failed the innovation ecosystem on a number of levels.

At the beginning of the innovation pipeline, universities spend considerable sums of money transitioning fundamental knowledge into applied knowledge and onto potential commercial application. The Federal and State Governments pour large sums of money into programs that support commercialisation of high technology. Incubators and most venture capital firms, however, plan for an exit strategy that involves international buy-out of start-up companies after five or so years. Overwhelmingly, the technology moves to an overseas manufacturing base and the opportunity is lost to the mainstream Australian economy. Clearly, this approach is not working towards the betterment of the regional economy.

In the traditional business incubator model, the idea is often more important than the emerging entrepreneur. Indeed, business managers often replace entrepreneurs during latter stages of the research and development stages of a new venture. Although there remains a place for incubators in the innovation and commercialisation pipeline, all incubators are ultimately self-serving, in that the employment of the personnel that run the incubator is dependent on the success of the start-ups that enter the incubator. Accepting only ideas/companies with a high potential for success mandates a stage-gated approach to building companies.

These failures in the innovation ecosystem highlight an important point: in business incubators, there is no freedom to experiment and to fail.

While we acknowledge that failure is part of every successful entrepreneur's journey (even in Australia), we do not teach people how to fail or provide opportunities to try. In the QIS, the emerging entrepreneur became more valuable than (or just valuable as) the idea.

The innovation landscape now provides a greater diversity of opportunities and avenues for progressing concepts to products with new different business models emerging that do not fit the brief of stage-gated entry into an incubator (e.g., Josephmark and <www.zova.com>). However, the onus of teaching entrepreneurial (and employability!) skills does and will not migrate to entities in the new innovation landscape. For-profit entities in the innovation ecosystem remain incapable of absorbing the cost of delivering the type of educational programs as described in this report, as they need investment returns built on success stories for long-term viability. Even not-for-profit entities, such as River City Labs, funded by a successful IT entrepreneur, have the undercurrent motive of being the first to discover a good investment opportunity.

In Australia, the only entity that can sustainably educate for enterprising and entrepreneurial skills, encouraging both success and the essential failure, is the university. In doing so, universities will also meet industry demands currently voiced in the debate surrounding employability skills.

Epilogue: Story of a Start-Up – QUT Innovation Space

The lifecycle of the QIS presents an interesting analogy to the 'Story of a Start-Up' seminars.

The QIS essentially began life as a business start-up. Born in the recognition of an opportunity (an ALTC Fellowship), the project concept was supported and underwritten by a business angel (the Executive Dean, Simon Kaplan) who understood and championed the intent. The QIS concept product was sequentially sold to the venture capitalists (QUT and the ALTC), which contributed increasing amounts of funds to get the product to market. Trade shows were organised to connect with potential partners and establish alliances with some interest from other companies (faculties) that depended first on examining their bottom line.

The early QIS product went through several rounds of refinement with start-up coaches (the QIS Advisory Board) and validation exercises (comparison with international exemplars). The QIS product was eventually launched on to the market (QUT students) and immediately found to be wanting in that it failed to adequately judge the market's readiness for a higher-level product. The client base was surveyed and the product evolved to better meet the simpler needs of the market. After that stumble, all aspects of the product catalogue were continually subjected to rigorous client testing (the QIS UAG) from the MVP approach, repackaged and re-released to the marketplace.

As happens with most start-ups, continual product testing led to a suite of products serving the client base, but high levels of cash-burn and low reserves also led to vulnerability of the start-up in the marketplace. The QIS products were duplicated by competing interests (faculties). Then, when the end was near, the QIS subsumed by a newer and larger 'competitor' also owned by one of the venture capitalists (QUT Student Support Services), better able to sustain the commitment through a base of larger resources and higher capital funding than available to the QIS.

While the QIS itself closes, and its 'employees' move on to other jobs (projects), the QIS products live on under the guise of another market entity that leverages the insight and work of the start-up (innovation by acquisition).

That is a typical start-up story, and with a very happy ending.

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Appendix A – Initial QIS Documents

List of Documents in Appendix A.

A1. Original: E-mail Adverts
A2. Original: Excerpts from the QIS Manual
A3. Original: Application for Entry to the QIS: Student Entrepreneur
A4. Original: Application for Entry to the QIS: Student Team Member
A5. QIS Event Review
A6. QIS Membership & Code of Conduct

A1. Original: E-mail Adverts

QUT Innovation Space

Do you have an idea that may make a great product?

Are you interested in the process of bringing ideas through to products?

The QIS is looking for students interested in learning the skills required to bring ideas through to the market place; students who want to make an impact by building sustainable enterprises serving the community and society.

Got a brilliant idea, but don't know what to do with it?

The QUT Innovation Space is open to any QUT student who is an innovator or entrepreneur with an idea of commercial or social potential who wants to learn how to develop that idea into a product or service.
Take advantage of this opportunity to learn the skills to start your own business and potentially get academic credit for it!

Interested in a career in innovation commercialisation?

Enter the QUT Innovation Space and take advantage of the opportunity to become involved in new venture development, and learn entrepreneurship and commercialisation skills, which could count towards your degree!

Interested?

Visit: <www.scitech.qut.edu.au/industry-community/qis>

Or email: qis@qut.edu.au

Real world learning, real world experiences, real world interactions, real world outcomes: QUT, a university for the real world.

A2. Original: Excerpts from the QIS Manual

The following sections are taken from the original QIS manual as initial systems were developed around the stage-gated model proposed for QIS operations. They are included to provide insight into how a stage-gated model would work, as originally envisaged, and provide comparison on how far the QIS evolved from a rigid, traditional incubator approach to training early stage entrepreneurial skills and a facilitation of co-working amongst like-minded individuals to meet client needs.

This section follows on from the lofty visions for the QIS as expressed in Chapter 3. The application forms for students are reproduced in Appendix A3 and A4. There is some overlap of content.

The QIS Itself

The QIS takes three parallel forms: a physical meeting and development space at QUT, as a student and project-centred virtual environment complementing the physical entity and as a relationship between QUT students, businesses, entrepreneurs, government and the University.

Inside the QUT Innovation Space, students will develop initial concept ideas into potential products. Support teams will be engaged to coalesce around the young entrepreneurs with industry and academics mentors and interested students providing logistical support for product development and commercialisation. Skills development will focus on market research, competitor analysis, intellectual property status and preliminary business planning.

Where the Ideas Can Come From

Ideas or intellectual capital or property (IP) can be brought to the QIS from any source, including:

- Undergraduate students – under QUT policy, undergraduate students own their IP;
- Academics or postgraduate students – where the IP is owned by QUT or where the IP is generated outside of the QUT research sector;
- Entrepreneurs – looking to develop initial concept ideas into new businesses;
- Businesses or industry representatives –
    - Where the IP and the new venture may remain with the industry partner, for example as part of their core business activity;
    - Alternately, the industry partner may elect to donate the IP to a new venture, for example where the IP is peripheral to the core business focus, and the new venture may evolve with a linked supply/client relationship to the industry partner;
- Mentors may wish to develop ideas and propositions from any source of open innovation.

The QIS Management

The QIS management team will comprise a Director, a Manager and an Advisory Board. A brief introduction of the responsibilities and roles of each component of the management team is provided here:

- A QIS Director will take leadership in developing, implementing and monitoring the activities and conduct of the QIS with input from the Advisory Board, develop the external relationships of the QIS and direct the activities of the QIS Manager;
- The QIS Manager will manage the day-to-day activities of the QIS and the student teams, facilitate the progression of the projects to realise positive outcomes, liaise with the Mentor Panel and the Advisory Board as required. The QIS Manager will serve as a secondary-tier mentor to each student team.
- An Advisory Board will advise the QIS Director on matters pertaining to the QIS including governance and strategic direction. The Board will comprise between eight and twelve members drawn from the innovation commercialisation ecology who have had a successful career of developing new enterprises (i.e., entrepreneurs). Membership of the Advisory Board is by invitation after discussion between the current Board members, the QIS Director and, where appropriate, senior management of the University. An elected Chair of the Advisory Board will conduct regular meetings or coordinate decisions made by flying minute.

The Mentor Panel

The Mentor Panel will normally comprise a collective of 25 – 30 entrepreneurially-inclined individuals who wish to volunteer their time to facilitating the progression of the student teams. Membership of the Mentor panel will be by invitation from the QIS Director under advice from the Advisory Board on suitable candidates. Potential mentors may also apply to the QIS Director or Advisory Board for membership of the Panel. Membership is also rewarded by the extension of visitor benefits distributed through QUT Information Technology Services.

An institutional representation on the Mentor Panel is also envisaged whereby individuals with an organisation may elect to address specific projects depending on time commitments and expertise. For example, members of QUT Bluebox will automatically be included in the Mentor Panel to serve as mentors for projects where QUT hold the rights to the intellectual property. In this instance, it is assumed that this requirement will be in place for projects involving ideas from QUT academics and postgraduate students derived as part of University research projects. Other examples may include Patent Law firms or State Government Departments where a collective of individuals may wish to provide mentorship.

A sub-panel of Mentors comprising 10 – 12 members will review and select student applications for entry into the QIS, recommend alternate approaches to student project proposals, recommend mentors for student team projects, examine equity issues related to projects, review progress of projects and recommend, where necessary, exit strategies. The sub-panel of Mentors may also review and select ideas volunteered to the QIS from entrepreneurs, business, industry, academics and PhD students.

Entry to the QIS

The QUT Innovation Space is open to any QUT student who:

- Is an innovator or entrepreneur with an idea of commercial or social potential who wishes develop that idea into a product, and/or
- Wishes to become involved in new venture development, to learn entrepreneurship and innovation commercialisation.

As outlined above, ideas, and thus involvement, may also come to the QIS from businesses, industry, academics, PhD students and entrepreneurs looking to research and develop a potential product.

Student entry is by application only. Motivation is the key ingredient.

We are looking for students to take their concepts to the marketplace; students who want to make an impact by building sustainable enterprises serving the community and society. You do not necessarily have to have the creative ideas to achieve this goal. Importantly, we are looking for students who understand that pain must precede gain.

How to Apply

Applications from student innovators and entrepreneurs (SI&Es) comprise an eight page (maximum) submission that outlines briefly the innovation, the novelty position, the potential product, intended market and resources required to bring the innovation to a prototype stage. A prototype SI&E Application Form is attached. In preparing an application, student innovators and entrepreneurs may elect to seek the assistance of individual members of the Mentor Panel and/or an academic to refine concepts. All SI&E applications will be reviewed by a sub-panel of Mentors and recommendations made, through the Chair, to the QIS Director and Manager on entry including potential mentors, suggested support team composition and comments on the overall development plan.

Students interested in learning to research, develop and refine concept ideas into potential products should submit an application that:

- *must* include resume, academic transcripts and an essay outlining case and reasons for admission (2 pages); and
- *can also* include a short statement of career directions, a portfolio demonstrating activities of an academic and extra-curricular nature, and/or any other artefact that demonstrates suitability.

Depending on the number and quality of applicants an interview may also be required. Entry is not based purely on academic grades.

Progression

Whatever the source of ideas, undergraduate students will provide the core of the project teams. Students, not bringing in ideas for a project, are expected to apply for project positions and undertake interviews led by the student entrepreneurs and the mentor team.

A major criterion for building project teams is based on the best-fit for project requirements, team structure and team dynamics.

When ideas come into the QIS from student innovators and entrepreneurs, SI&Es will be matched to potential mentors from the Mentor Panel depending on the disciplinary requirements of the project. SI&Es may also elect to petition other mentors for involvement in the project. SI&Es will work with mentor/s to refine the project plan and management, devise an appropriate new venture structure, develop protocols, and enlist a viable student team to support the project activities. The project management established by the SI&E, in consultation with mentors, is responsible for project implementation, development, documentation, reporting and progress in accordance with requirements of project plan.

When ideas come into the QIS from industry, businesses or individual entrepreneurs, projects would normally be expected to be advertised and the project team formed by the normal process of student application and interview led by the external partner and potential mentors. Intellectual property in this instance will remain with the external partner but arrangements may be developed if there is significant departure from the original concept made by the student team.

When ideas come into the QIS from academics or PhD students where intellectual property rights covering the innovation have already been assigned to QUT, at least one of the mentors involved in the project must come from QUT Bluebox.

A first step of any project will be the consideration of what, if any, Confidentiality Agreements (CAs) and Memorandums of Understanding (MOUs; in the form of learning and/or development contracts) need to be implemented. The implementation of MOUs and CAs should be considered as context-specific and not necessarily a mandatory component of every new project. Any MOUs and CAs should be minimalistic in content and simple in language.

The QIS Management will review all projects at no more than six-month intervals and assess the level of progress achieved in the context of opportunity. Project teams are required to submit a brief report (two pages maximum) every six months outlining the project status, progress since last review and the plan for next six months. Submissions and recommendations from any of the groups involved in the project may also be attached to the project reports or submitted independently. On-going activities related to students' course progressions are recognised and take priority over all else. Where projects have stagnated, the QIS Management and Mentors will meet with the project team to discuss potential stimulus measures.

Exiting the QIS

Unfortunately, all good things must come to an end. New ventures, or individuals, may exit the QIS in any one of a number of ways. A few examples follow.

Voluntary Termination of Ventures

Not all ideas will become ventures, whether for profit or non-profit; in fact very few will make the transition. During the process of scoping ideas into products and companies, it may become apparent that opportunities are not commercially or socially viable. Student teams can elect to terminate a project at any point in the cycle after seeking advice from the Mentors involved with the project.

Acquisition of Venture Finance

The acquisition of venture capital or business angel finance marks a transition point of any new venture; the gaining of a level of maturity. Ideas become reality and imperatives change. Venture finance also means future prospects. It is appropriate at this juncture for the new enterprise to move to new premises, such as a business incubator (eg, iLab in Toowong or Brisbane Technology Park in Eight Mile Plains).

A Time Limit Applies

A time limit of **two** years applies for new business development/ventures initiated by student innovators in QIS. This time restriction is not related to graduation timelines but rather practical considerations of commitment of the innovator and the growth cycle of new enterprises. New student ventures can be started by a student innovator in the final year of a course and the venture continue in the QIS for a maximum of three years with a *meaningful, majority* involvement of enrolled QUT students. With the latter proviso, it is in the interests of the innovator and graduating student team members to plan for succession of team members as appropriate.

Unsatisfactory Progress

If the QIS Management should deem progress unsatisfactory, based on the six monthly project progress reports, the project team will be served notice as such and a formal process for terminating the project will be initiated.

Exclusion of Individuals

Team dynamics are important in the process of building ideas into small companies. Teams may hire and fire members as determined by the management of the project team. Grounds for dismissal must be able to be appropriately justified in a one-page report (maximum) to the QIS Management. Dismissal can be made without reference to any credit point related status of the student's activities required by University-based curriculum.

Individuals may be excluded from student teams, from the Input Groups, and from the QUT Innovation Space as the QIS Management sees fit after appropriate consultation with all parties involved. The QUT Innovation Space is the property of QUT and thus all individuals whether students, staff, mentors, visitors, guests, members of the Advisory Board or one of the Input Groups must abide by QUT policies, procedures and regulations as outlined in the QUT Manual of Policy and Procedures (www.mopp.qut.edu.au).

A3. Original: Application for Entry to the QIS: Student Entrepreneur

This process applies only to entry to the QIS by students with an idea or innovation for commercial or social development. Information about the innovation, its ownership and derivation, level of development and potential markets is required to evaluate the potential of the innovation.

The application process also serves to demonstrate an innovator's commitment and understanding of the innovation in relation to the context, competing technologies/ideas and the commercialisation requirements.

Applications should be in MS Word, no longer than eight (8) pages, and emailed to qis@qut.com. Applications are received on a continual basis. Applicants will be notified no more than one month from submission of application.

Applicants may not have all the required information and, if this is the case, just say so. As part of the application process applicants will be interviewed.

Applicants may enlist the assistance of mentors/academics to complete the application. In cases where QUT owns the IP, it is anticipated that QUT Bluebox may provide assistance in completing the application.

Framework of Application

1. Application details

1.1. Title of application
1.2. Names and contact details of applicant/s
1.3. Current course and year level of applicant/s

2. Background

2.1. The context of the problem or situation
What problem is the innovation solving?

2.2. Existing technology in the area
What technology, if any, currently exists? E.g., related or competing technologies and/or new developments. Is the innovation replacing a current technology?

2.3. Description of innovation, including:
2.3.1. Novelty aspects
Why is the innovation unique? Why is it better than its competitors or the current technology?
2.3.2. Commercial products/uses of innovation
What can the innovation be used for? What is the purpose of the innovation?
2.3.3. Statement of ownership, input and equity
Confirm you own the innovation. Who contributed to this intellectual capital, what did each person contribute, and what share of ownership does each have?

3. Market Analysis

3.1. Market existence
Does a market for this innovation currently exist? If so, please identify the market size.

3.2. Competitors
Are there any competitors? Do these directly or indirectly compete with the innovation?

3.3. Target markets
Who would use this product or service? Who would be the prime focus for marketing purposes?

4. Innovation development

4.1. Current status
At what stage is your innovation? E.g., initial concept, developed concept, basic prototype, advanced prototype, commercial-ready product

4.2. Developmental pathway

4.2.1. Description of pathway
Describe how you foresee the development progressing, including estimated time and financial estimates, if possible.

4.2.2. Personnel required
Identify the potential management and technical/developmental positions and skills required.

What sort of people and other resources do you think would be helpful in developing your idea?

4.2.3. Impediments to development and/or commercial adoption
Are there any reasons development may not be able to progress?

4.2.4. Use of other's technology/information
Do you require the use of other patented technology or information?

5. Extent of disclosure/dissemination

Who have you disclosed this idea to? NB: Where necessary QIS will enter into appropriate confidentiality agreements.

6. Commercial relationships

Are there any existing commercial relationships? Do you have any ideas for potential partners and why? If not, what types of commercial relationships would be required?

7. Sponsorship (e.g. grants, fund-raising activities)

Has this innovation received any funding previously?

8. Statement of personal commitment

Do you understand the time commitments involved? Will you be able to handle the workload of your current course of study as well as this? How many hours per week would you dedicate to your innovation?

Have you had any entrepreneurial or product development experience – if so provide details (note this is not necessary for QIS, we are simply seeking to know you a little better).

Briefly describe your personal strengths and weaknesses, and make some comments about how you intend to address those weaknesses in the context of developing your idea.

What are you hoping to gain from your QIS experience?

A4. Original: Application for Entry to QIS: Student Team Member

This process applies only to entry to the QIS by QUT students interested in learning to research, develop and refine concept ideas into potential products by joining a student innovation team.

The points below lay out a framework of basic information. The application process also serves to demonstrate student's commitment to exercise. The page lengths are indicative only.

Framework of Application

Applications should include the following mandatory components:

- Updated resume (2 page max),
- A copy of academic transcripts (2 page max), and
- An essay outlining case and reasons for admission (1 page max).

Applications can be supplemented by any of the following:

- A short statement of career directions,
- A portfolio demonstrating activities of an academic and extra-curricular nature, and
- Other artefacts that demonstrate or support suitability.

The supplementary category should not attempt to *duplicate* the content of the mandatory sections.

Applications should be in MS Word, no longer than eight (8) pages, and emailed to qis@qut.com.

Applications are received on a continual basis. Applicants will be notified no more than one month from submission of application. Interviews may also form part of the entry process.

A5. QIS Event Review

Each and every event/workshop/activity held by the QIS was accompanied by an event review that the QIS staff filled out.

The format of the event review is as follows:

QIS Event Review

Event title:

Aim of event:

Location:

Attendance (no.)**:**

Data collected (photos/recordings/email contacts/feedback):

Successful? Why??

Verbal feedback from participants:

Outcomes (for participants – opportunities, connections, new ideas, etc):

How did people find out about the event?

Opportunities for improvement:

A6. QIS Membership & Code of Conduct

What You Get

- Access to information and inspiration – presentations, talks, events and workshops.
- Access to like-minded people – individuals with an abundance of constructive criticism, knowledge, potential collaborators, peer mentors and peer support.
- Access to member services – idea screening, IP consultations, business development program, mentoring program, feedback, the services exchange, 'Just-in-Time Learning' and tailored support.
- Access to member resources – tools, templates and practical resources to help you with your idea, business or invention.

Shared Responsibilities

- Members agree to encourage participation – greet new members and give constructive feedback.
- Members agree to act with honesty and transparency – treat others as you would like to be treated.
- Members agree to take responsibility for the protection of their ideas and IP – get up-skilled and understand the IP issues relevant to your idea, technology or invention, consider a confidentiality agreement, talk to QIS' in house lawyer.
- Members agree to prevent disclosure of other members' ideas – disclosure of someone's technology can destroy their chance to patent or commercialise. It might be a cool idea, but respect that they have shared it with you in confidence. Put it in the vault.

The Space

- Contributing to ideas provides a sense of place and encourages engagement – generosity is good for your health.
- Contributing to other members' ideas does not confer ownership – inventors retain their rights.
- Personal information is managed in accordance with the Information Privacy Act 2009 – we don't spam and we don't sell your data.
- QIS believes in environmentally and socially responsibility businesses – we have resources on hand to help embed these principles within your idea, technology or business.
- QIS, and the resources and services we offer, are continually evolving and improving. Your recommendations, feedback and suggestions are welcomed and essential to the development of QIS.

Privacy, Photos and Your Information

- Members agree to allow QIS to use event photos and other documentation that may include you for the sole purpose of promoting itself – we won't sell or share your information, photos or your data.

Terminology

- *Members* are those who have agreed to the Code of Conduct.
- *QIS* stands for QUT Innovation Space.
- *Ideas* include all forms of intellectual property.

Contact Details

- Please tick this box if you would like QIS to inform you of upcoming events. ☐
- Please tick this box if you would like QIS to publish your contact details within the network. ☐
- Please complete and sign the form if you agree to the terms and conditions outlined above.

NAME _____

EMAIL _____

PHONE (optional) _____

SIGNATURE _____

Appendix B – The Entrepreneur's Starter Kit Resource

As outlined in Chapter 5, the Starter Kit was a document that went through many revisions and re-iterations.

A version (#10), complete with editorial comment, is provided here before it was abandoned. Spaces between sections have been removed in certain areas to conserve space.

The document is not complete, the inclusion here only serves to provide scope of the problems associated with attempting to create and maintain relevant resource documents for projects like the QIS in an environment that was evolving rapidly.

QIS Entrepreneur Starter Kit

Introduction

Welcome to the QUT Innovation Space (QIS).

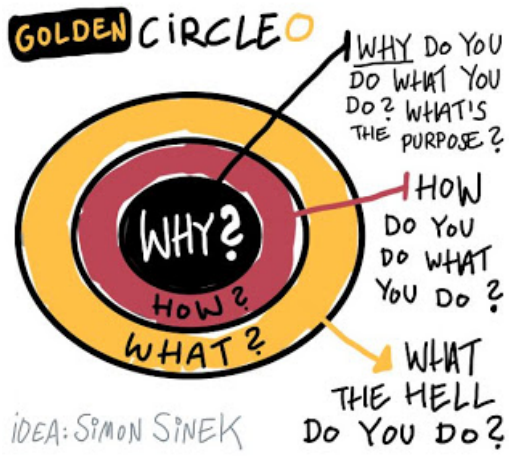
QIS supports QUT student animate their ideas and build extra curricula commercialisation and entrepreneurial skills.

We are action focused and facilitate mentoring, workshops, seminars and events that foster entrepreneurship and entrepreneurial skills at QUT.

QIS is a place to prototype, test and develop your latest business idea or to develop entrepreneurial skills for the future.

The following Starter Kit is a collection of tools to help you develop your idea. Each page outlines a tool or a concept that we have found valuable for the development of an idea, business or technology. Consider each page an introduction to the tool; please use the included resources to find more information.

What's your WHY?



Before you get into the nitty gritty of building your business or idea, writing your business plan, ordering materials, negotiating contracts, becoming an overnights success and reaching financial independence, etc.

Have you asked yourself why this idea/business? Why am I passionate about this? Why do I care? Why should anyone else care?

Understanding your WHY, your subconscious drivers and motivators, will be essential to the survival of your idea, your success and convincing people they should care about what you are doing.

	APPLE	**Traditional computer Company**
WHAT	We sell computers	We sell computers
HOW	Researching and developing innovative interfaces between humans and technology.	By making and distributing computers
WHY	Challenge the *status quo* to empower the individual	Make money

Watch Simon Sinek's presentation on TED TV before continuing:
How Great Leaders Inspire Action - http://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action.html
See www.startwithwhy.com *for more info on Simon Sinek.*

Answer the following about your business or idea

1. **WHY?** (What's your purpose)

2. **HOW?** (How are you expressing that purpose, What skills are you using/developing, how do you spend most of your time each day)

3. **WHAT?** (What product or service are you offering to the world)

Three Types of Entrepreneurs: where do you want to be?

Idea lifecycle

There are many ways of framing the idea lifecycle, the following is just one that we like to use at QIS.

Idea Checklist

Can you answer the following questions about your idea? If not, take some time to look at the holes and work on those areas.

1. What problem is it solving?

2. What is your solution to the problem?

3. Who are customers, clients or audience? (Who are you solving the problem for?)

4. Will they pay for it? (How do you know they will pay for it?)

5. Is anyone else doing it already?
    a. If not, why not?
    b. If yes, why is your idea better?

6. Who is your competition?

7. Does it fulfil a real need or do you need to create the need through promotion and advertising?

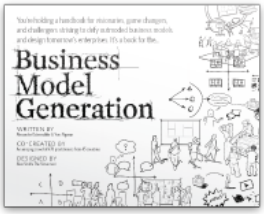
8. What is your next step to move forward?

9. Can you explain your idea, business or product in 30 seconds or less?

10. Can you explain your idea in 2 sentences or less?

Business Model Canvas

The business model canvas is a great visual tool to map out your business and how it will work in one page. The Business Model Canvas can help you summarise your business plan into one page. Whether you were 100% clear on all the questions in the above checklist or there are elements of your business idea you are still nutting out, this map is a valuable tool for anyone at any stage of their idea development.



Please find a copy of the business model canvas attached at the back of this kit. For more information on how to use the business model canvas see the following resources:

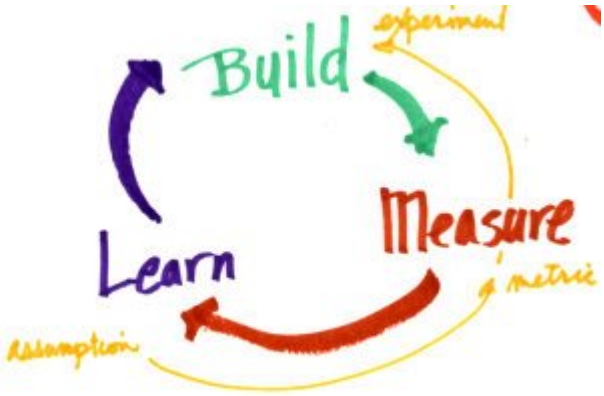
- Book: Business Model Generation, Written by Alexander Osterwalder & Yves Pigneur
- Website: http://www.businessmodelgeneration.com
- The canvas: can be downloaded here - http://www.businessmodelgeneration.com/downloads/business_model_canvas_poster.pdf
- Other web resources:
    - Businessmodelhub.com
    - Presentation with author: Tools for Business Model Generation - http://www.youtube.com/watch?v=8GIbCg8NpBw

Minimum Viable Product

The concept of the Minimum Viable Product (MVP) is a framework to develop a business or idea that reflects the wants and needs of the customer. It is an excellent tool to continually test and develop your idea.

A MVP is .. *" version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort".*

The term was coined by entrepreneur Eric Ries. See below for resources that explore the concept more thoroughly.



Resources:

- Book: The Lean Startup by Eric Ries
- Blog from author: http://www.startuplessonslearned.com/
- The Lean Startup: Benefits and Criticisms - http://www.liveplan.com/blog/2012/08/the-lean-startup-benefits-and-criticisms/

Intellectual Property

Depending on the idea you are developing and where you want to take it, Intellectual property protection can be essential or have little significance. The important element is that you take a proactive approach to your own education and develop a well informed IP strategy that is designed to maximise your ideas potential and acts as a vehicle to reach the vision you have for that idea.

There is no one correct answer.

A. Types of IP Protection

Registered intellectual property (IP) rights serve as an incentive to reward innovation by providing IP creators and owners with the time and opportunity to exploit their creation. However, IP rights exist in many forms and in some cases they don't need to be registered in order to be of value. Each type of IP provides different competitive advantages for its

owners and new commercialisation opportunities for organisations.

What's protected	Type of IP protection	What it means	Example
Product designs	Registered design	The visual appearance of a product is protected, but not the way it works.	Ipod kitchen appliances footwear fashion items
Logos, words letters, numbers, colours, a phrase, sound, scent, shape, picture, aspect of packaging or branding - or any combination of these	Trade mark	A trade mark identifies the particular goods or services of a trader as distinct from those of other traders.	Qantas® Lonely Planet®
Inventions and new processes	Patent	A patent protects how an invention works or functions.	Polymer bank notes Anti cervical cancer drug, Gardasil
Drawings, art, literature, music, film, broadcasts, computer programs	Copyright	The owner's original expression of ideas is protected, but not the ideas themselves.	Typefaces and fonts
Trade secrets and confidential information	Other	These types of IP rights give creators certain rights and privileges depending on the type of IP protection.	Coca Cola has used trade secrets to keep its formula from becoming public for decades.
New plant variety	Plant Breeder's Rights	Plant Breeder's rights protect the commercial rights of new plant varieties	Cotton plants with insect resistance and the pink iceberg rose

For more info please see: www.ipaustralia.gov.au.

B. Confidentiality

A non-disclosure agreement (NDA), also known as a confidentiality agreement (CA), confidential disclosure agreement (CDA), proprietary information agreement (PIA), or secrecy agreement, is a legal contract between at least two parties that outlines confidential material, knowledge, or information that the parties wish to share with one another for certain purposes, although wishing to restrict access to or by third parties. It is a contract in which parties agree not to disclose information covered by the agreement. An NDA creates a confidential relationship between the parties protecting any type of confidential and proprietary information.

C. IP Assignment Deed

A Deed of Assignment is a document or agreement which an assignor (the transferor) states his promise that from the date of the assignment or any date stipulated therein, the assignor assigns his ownership in that property to the assignee (transferee).

D. Legal Advice & More Info

IP Australia
IP Australia is the Australian Government agency that administers intellectual property (IP) rights and legislation relating to patents, trade marks, designs and plant breeder's rights. The IP Australia website has an large amount of information on different types of IP in Australia and what they cover as well as how to register (<www.ipaustralia.gov.au>).

QPILCH
Queensland Public Interest Law Clearing House Incorporated is a non-for-profit community based legal organisation. This coordinates the provision of pro bono legal services for individuals and community groups. To contact QPILCH or for more information see: <www.qpilch.org.au/>.

Business Structures

Insert info about becoming incorporated and differences between business structures.

Other Useful resources for Entrepreneurs & Innovators

Innovation tool box
http://www.innovationtoolbox.com.au/

Commercialisation Australia
Proof of Concept
http://www.commercialisationaustralia.gov.au/WhatWeOffer/ProofOfConcept/Pages/default.aspx

New Enterprise Incentive Scheme – get paid to innovate full-time!
http://www.deewr.gov.au/Employment/JSA/EmploymentServices/Pages/NEIS.aspx

What is Intellectual Property?
http://www.ipaustralia.gov.au/ip/index.shtml

Help for Business start-ups from Qld Govt
www.business.qld.gov.au

Free professional software for students from Microsoft
http://www.microsoft.com/web/websitespark/
http://www.microsoft.com/bizspark/
https://www.dreamspark.com

Appendix C – QIS Mentor Scheme & A New Model

C1. QIS Mentor Scheme 2012

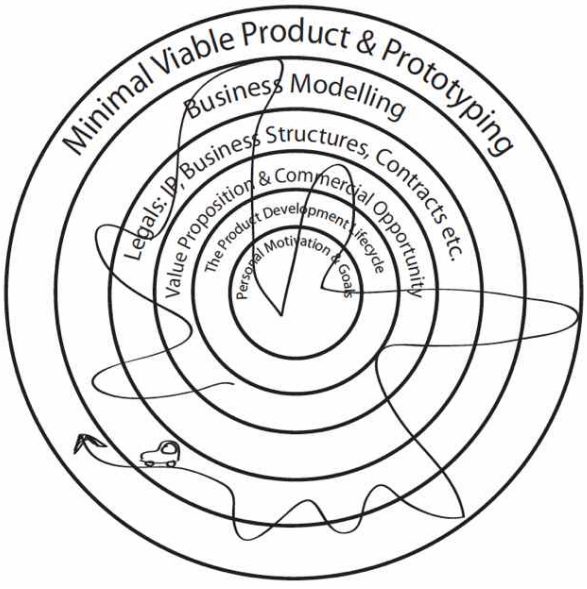
The following describes the QIS mentoring process introduced on page 72.

QIS Mentor Scheme

Introduction

The QIS mentor program provides tailored and specific support for those students with an idea, business or technology in development. Through the mentor program students can: access one-to-one feedback sessions where they workshop their idea, speak to an IP attorney (and other experts) and/or be connected with industry representatives and mentors.

An important element of the program, and a key feature that differentiates QIS from other entrepreneurship programs, accelerators and incubators, is the emphasis primarily on the development of the student's entrepreneurial skills rather than purely the potential of their idea. The idea becomes a vehicle for the development of skills and competencies.



The Process

While learning is pivoted around the development of an idea, the focus of the mentor is primary the development of skills and competencies. The process is not linear but rather oscillates between action and planning/goal setting and back to action, moving through the stages of idea conception to commercialisation.

A student that is engaged in the mentor program typically goes through the following steps.

1. Student working on an idea makes an appointment for a feedback sessions with the QIS mentor officer at anytime.
2. Feedback Session – in this session the QIS mentor officer aims to address the following through a series of sessions:
    a. Discuss the idea and the student's personal motivations and goals.

    b. Discuss current blockers and knowledge gaps and work with the student to develop actionable tasks to address these.
    c. Identify three QIS mentors that would be beneficial to have a coffee with (two industry mentors and one peer mentor).
3. After the first feedback session QIS organises three coffee mentoring sessions with the mentors identified in the first session.
4. Progress Sessions - with QIS mentor officer.
    a. These sessions are driven by the student and not by QIS.
    b. They sessions aim to progressively develop goals and work through those goals with the student.
    c. Overall the mentoring program progresses along the following goals (this does not often occur sequentially):
        i. Identify their personal motivations for developing this idea and what the student hopes to achieve.
        ii. Gain an understanding of the new product/business development lifecycle and where they currently sit in that cycle.
        iii. Develop an IP strategy if appropriate.
        iv. Identify the commercial opportunity within their idea.
        v. Develop a business model that can animate that commercial opportunity or develop a commercialisation strategy.
        vi. Develop, test and refine a prototype.

Who can access the mentor program?

Any student, staff or academic at QUT who is developing an idea, business or technology.

The Mentors

Mentors are engaged on an understanding that they will provide a maximum of ~3 X 30 – 60 min coffee feedback sessions a semester, no on-going mentoring is expected. They are not required to commit any resources outside of the 'coffee feedback'. Any additional commitment is at the mentor's discretion. Please see the mentor's invitation letter (below) for more details.

There are four types of mentors that a student engages concurrently within the program: QIS mentor, industry mentors, expert advisors (e.g, IP Attorney) and peer mentors. The program is built around on-going sessions with the QIS mentor, sessions with industry mentors and peer mentors are introduced to compliment the process. Sessions with Industry mentors bring in current industry knowledge and connections beyond that of the QIS mentor. While, sessions with peer mentors provide further opportunity to brainstorm their venture and become comfortable with asking for and evaluating advice and the perspectives of others.

The following sections provide further information regarding the levels of mentoring.

QIS Mentoring

The QIS mentor meets periodically with the student to:

- Progress through the topics outlined above, workshopping these in the context of the student idea;
- Facilitate meetings with Industry mentors, peer mentors or other advisors available through QIS; and
- Work with the student to identify current gaps in their skills and knowledge and develop strategies to overcome these.

Industry Mentors

Industry mentors meet with students to add industry specific advice, perspective and insight. Sessions with industry mentors are not designed to be ongoing. Students meet with a variety of industry mentors and therefore are exposed to a range of feedback, perspectives, connections and advice.

Peer Mentors

Peer mentoring leverages knowledge and experience from within the university. Within a cohort of student entrepreneurs there is a medley of skills, experience and connections. Mentoring covers everybody: from the first year, with no exposure to business modelling, to the mature aged student that currently runs his own business and has returned to study, and everything in between. This element not only fosters knowledge sharing between students and leverages skills and experience present on campus but it also enables students to develop the skills to think critically about feedback and advice as well as the ideas of others when they themselves act as a mentor.

Resources

The mentor program has been designed to provide maximum support with limited staffing resources and leverage a small input, such as a coffee, from many volunteer mentors, rather than requiring significant commitment of time and energy from a few mentors. The program also aims to foster peer-to-peer learning and leverages the knowledge already present within the network of student entrepreneurs at QUT. Students can access the mentor program as little or as much as they wish, and participation is self-driven.

Objectives

The QIS mentor program is designed to support student entrepreneurs who are developing an idea, business or technology. It provides specific support to the student, relevant to their current needs and their idea.

The program aims to develop the student's entrepreneurial skills primarily and the development of a successful idea becomes a bi-product of that process. Their idea becomes

a vehicle through which the student learns to practically evaluate, develop and execute any idea.

The base of the mentor program is built around periodic feedback and progress sessions with QIS. Industry mentors, Advisors and peer mentors slot into this process and add depth, market testing and industry specific experience, perspectives and advice.

The objectives of the program are:

1. **Feedback Sessions with QIS mentor**
    - Encourage students who demonstrate entrepreneurial behaviour by providing feedback on their idea(s) and connecting them to a community of student entrepreneurs.
    - Work with the student to:
        1. Understand how personal motivations and goals are essential to success and how each idea relates to their personal drivers.
        2. Develop an understanding of the new product development lifecycle.
        3. Clearly identify and articulate the commercial opportunity within any idea.
        4. Understand how to develop a business model.
    - Work with the student to identify current blockers or knowledge gaps and develop actions to move beyond these.
    - Direct students to resources, programs and other support.
    - Facilitate connections to industry mentors, peer mentors or other advisors both within and external to the university.
    - Provide progress and feedback sessions as the idea and student progress.
2. **Mentor sessions with industry**
    - Connect students to a range of industry mentors and experts that can provide industry specific advice and feedback.
    - Create connections with industry to support commercialisation of students' ideas, business or technology.
    - Encourage students to think critically about what they want from a mentor and their role in the mentor mentee relationship.
    - Develop students' confidence to strategically seek out mentoring, advice and support now and in the future.
3. **Peer mentor sessions**
    - Enhance customer testing.
    - Leverage knowledge already present on campus.
    - Promote connections among entrepreneurial students.
    - Provide a platform for usability testing with peers.
    - Facilitate knowledge sharing among student entrepreneurs.

4. **Being a peer mentor**
    - Enhance students' ability to evaluate ideas, identify obstacles to implementation and give constructive feedback.

Starter kit

The starter kit is a resource pack that gives students tools and resources to support them as they develop their skills and their idea. [Appendix B of this report.]

C2. A New Mentor Model

The following describes an action-based mentoring model based on group mentoring sessions. This model, based on the lessons learned from the model prevailing in the QIS through 2012, was developed at the end of 2012 for the QUT LDI program (and hence the links and names refer to the LDI and not QIS).

QIS Mentor Clinic

Introduction

Action focused mentoring for ideas, start-ups and social change projects

One-on-one mentoring for QUT students with an idea, start-up or social change project. The bi-monthly QUT Mentor Clinic provides an injection of feedback, guidance and resources to help you move forward with our idea, start-up or social change project.

Projects at any stage are welcome, from initial ideas to established start-ups/projects.

To register, or see who will be at our next mentor clinic, please see the <HERE – link to LDI web page>.

Who Can Sign-Up?

The Mentor Clinic is one of the many offerings of the Leadership Development and Innovation (LDI) program and is available to all participants registered in the program. The LDI program is a free extra-curricular program that offers a range of personal and professional development opportunities for QUT students or academics.

More details on the LDI program <HERE – link to LDI web page>.

NOTE: The Mentor Sessions are not available for help with university assignments.

The Mentor Program DNA/Ethos

- Action focused.
- Based on real projects not hypotheticals or assignments.
- Self-directed and 'light-touch' mentoring (come with specific questions you need help with)
- Be kind and generous with your mentoring and feedback.
- Personal value - Do you really care about this project?
- People centric not idea centric – (success gauged by how much you learn not by the success of your idea)
- Self-development, professional development and life-long learning.

Day Program

Last Friday of every 2nd month (11:00 – 6:00)

12:00 – 1:00	Making ideas happen – Workshops 1	
1:00 – 2:00	Making Ideas happen – Workshop 2 or GAS Group (Group Accountability Session)	
2:00 – 2:45	Lunch	
3:00 – 4:45	Mentor sessions	Students self allocate to the mentors they want to see online. (this also collects their general question areas prior to the day so the most appropriate mentors can be sourced.
4:45 – 5:00	Summarise key learnings & add to the 'Advisory Board"	
5:00 – 6:00	Drinks with the mentors	

**extend mentor session time if demand requires*
Mentor : Participant Ratio = ~1:3 (mentor : student)
Minimum numbers = 8:24 (mentor : student)

Mentoring Schedule

	Mentor 1	Mentor 2	Mentor 3	Mentor 4	Mentor 5	Mentor 6	Mentor 7	Mentor 8
3:00 – 3:20								
3:20 – 3:40								
3:40 – 4:00								
4:00 – 4:20								
4:20 – 4:40								
4:40 – 5:00								
3:00 – 3:20								
3:20 – 3:40								
3:40 – 4:00								
4:00 – 4:20								
4:20 – 4:40								

The Advisory 'Board'

At the end of the session students are asked to summarise their key take-aways from the session onto post-it notes. These generic 'tips' go on an 'Advisor Board' for all to peruse.

Typical Areas Mentors Need to Address at the Undergraduate Level

Topic	Type of Mentor
Idea development	Peer mentors &/or local entrepreneurs
Where do I start	
Idea feedback & usability testing	
Intellectual property advice	Volunteer/sponsor IP attorney
Business legals – structures, contracts, etc.	Industry representative, business consultant, local entrepreneurs – depends on level of advice needed
Business modelling	Local entrepreneurs, design-led innovation students
Social enterprises	Industry guest
Technical developments (apps, web & software)	Industry representative, IT students, Corporate systems management student
Social media	
General idea development	Local entrepreneur
Financing	Venture capitalist, business angel, bank
Minimum viable product	Local entrepreneur

Making Ideas Happen – Workshop Outlines

Workshop 1

1. What's my why?
2. The development lifecycle – Where am I?
3. Three types of entrepreneurs – Where do I want to be?
4. Idea Checklist/business model canvas –Where are the fuzzy areas in my idea?
5. Being Action Focused
6. Personal Motivations – What does success look like to me and when do I quit?
7. Value proposition – what am I offering the customer/client/etc?

Workshop 2

1. Check in – Has my why changed/ become clearer?
2. Business Model Canvas
3. Minimum Viable Product
4. Intellectual Property
5. Giving feedback and being a mentor.
6. My sphere of influence – resourcing

GAS (Group Accountability Session)

For those that have already completed workshop 2, they will form peer-mentoring sessions focused on problem solving and feedback.

Appendix D – QIS Start-Up Internship Program

The following documents describe the internship program. The program was trialled in late 2012 and two students were accommodated in River City Labs. The document was still evolving as the QIS project came to an end. Inclusion here only serves to provide scope of the concerns that need to be addressed and the processes associated with any internship program.

Gaps between lines have been removed to save space.

QIS Start-Up Internships

Introduction

The QIS Start-Up Internship immerses entrepreneurially minded students into the Brisbane Start-Up Community. It provides students an opportunity to practically experience what it is like turning an idea into reality and creating a start-up.

The Internship is a culturally immersive experience that enables students to gather the intangible skills essential to an entrepreneurial mindset. This is complemented with the practical exposure to contacts, peers, mentors and an ecosystem of other connections necessary to successfully establish a new venture.

This immersive experience is possible through a partnership with River City Labs, a Brisbane Co-Working space that supports emerging ideas in the mobile, Internet, telecoms and technology space. Interns are placed with Resident Start-Ups at River City Labs. Students not only work with a specific Start-Up, they work within River City Labs and within a community of entrepreneurs and a culture of idea generation, idea evaluation and commercialisation.

Marketing Copy: For Start-Up Venture

Are you a Brisbane Start-Up? Do you have a project that you need some help with?

Access affordable skilled labour and foster the Brisbane Start-Up community by sponsoring a Start-Up Intern from the Queensland University of Technology (QUT). Students interested in entrepreneurship work on a defined project for up to the equivalent of 30 working days. Working with the university means that your start-up does not infringe on the Fair Work Act 2009 and the intern is covered by the University's insurance for up to the equivalent of 30 days of work.

How Does It Work?

1. **Define** - Define your project and submit to the QUT Innovation Space (projects must able to be completed in 30 days of work).
2. **Advertise** - The project will be advertised to the relevant faculty, depending on the skills required.
3. **Select** - Applications and resumes will be forwarded to the Start-Up. Who can them chose the eligible applicant. We highly recommend that you meet the eligible applicants face-to-face prior to beginning the project.
4. **Contract & Insurance** - Both the Start-Up and the Intern(s) must agree on the timeframe, workload, expectations and deliverables of the internship. As well as complete the necessary insurance documentation. .
5. **Work & Experience** - Students work on the project up to an equivalent of 30 days of work. This may be full time or part time. (Please note: The project does not need to be completed within a 30 day period, but the days worked must not exceed the equivalent of 30 standard working days).
6. **Finish & Reporting** - There are no reporting requirements for sponsoring an intern. We may ask you for a photo at some point through the process and possibly a testimonial down the track.

Why Should I Do This Through QUT?

Engaging an intern through the university is more than just providing affordable labour to start-ups and work experience for skilled students.

Fair work Act 2009
Through engaging a student intern through the QUT you ensure that your start-up is not infringing on the Fair work 2009. For more work on the Fair work Act 2009 please see - http://www.fwa.gov.au/index.cfm?pagename=legislationfwact.

Insurance
The program provides insurance cover to the student and ensures the sponsoring business is not infringing on Fair Work Act 2009. For more information on the insurance details please contact the program coordinator.

More information on QUT's insurance policy can be found here -

http://www.frp.qut.edu.au/services/insurance/student_accident.jsp

Foster Brisbane's Start-up & entrepreneur culture
The program gives entrepreneurially minded students an opportunity to see what it is like to build a start-up before taking the leap themselves.

Find staff that fit your organisation
If you get along fantastically with your intern you may choose to hire them, or there are also options for students to take on larger projects that could be counted towards their degree.

What We Don't Do?

We do not select the students for you, nor do we mediate the project.

It is your responsibility to clearly define: the project, the outcomes, the time frame, your expectations, and select the best student for the project and your company. We are not able to mediate or manage the project or the student. Please choose students carefully, just as you would when choosing an employee.

Please note that you must be able to provide guidance and support to the participating student.

Who Is Eligible?

As a new initiative, we are only offering the program to current residents of River City Labs.

How Much Does It Cost?

There is no cost to participate in the program.

When Will It Begin?

The first round of this program will take place over the summer 2012. An exact time frame can be arranged to suit the participating start-up and student.

How Do I Get Involved Or Get More Info?

Please contact qis@qut.edu.au to meet with the program coordinator for any further questions or to receive the **Start-up Internship program enrolment form**.

Marketing Copy: For Students

What does it really take to turn an idea into reality?

See for yourself by enrolling in the QUT Summer Start-Up Internship. Be immersed in the Brisbane Start-Up scene by for one of the residents of Co-working space and start-up incubator River City Labs.

If you have ever thought about creating a game changing business or technology, here is the opportunity to start building your contacts, experience, knowledge and get a sneak peek into what it's really like turning an idea into reality.

The QUT Start-Up Internship gives entrepreneurial students an insight into the dynamic and exciting nature of a start-up business.

How Does It Work?

1. **Apply -** See the QUT Innovation Space for a list of available Internship projects. For any project that fits your skills and/or your interests submit an application to qis@qut.edu.au.
2. **Selection Process** - Each start-up is responsible for selecting an intern, we will let you know if your application has been successful. If applicable the start-up may chose to interview interested interns before starting the project.
3. **Contract & Insurance** - Both the Start-Up Company and the Intern(s) will meet to collaboratively define the timeframe, workload, expectations and deliverables of the internship and complete the necessary insurance and documentation before beginning the project.
4. **Work at River City Labs** - To complete the project you will be working from River City Labs, a start-up co-working space in Fortitude Valley. You will be immersed in Brisbane's emerging start-up & entrepreneurship community. You will have the opportunity to meet other start-ups, attend all River City Labs' events, and connect with the visiting professional mentors. A fantastic way to build your network knowledge and experience.
5. **Finish & Reporting** - There are no reporting requirements for an intern. We may ask you for a photo at some point through the process and possibly a testimonial down the track.

How Long Is The Internship?

The length of the internship will depend on the needs and availability of the student and the sponsoring Start-Up. However, under the Fair Work Act 2009, the internship cannot exceed more than the equivalent of 30 working days. This means, that the total number of hours cannot exceed the equivalent of 30 days X 7.6 hrs/day (228hrs in total).

The internship can be conducted full time or part-time depending on the start-up, student and project.

Where Will I Work?

You will complete the internship working from River City Labs under the guidance of a sponsoring Brisbane Start-Up.

Although you will be working with just one of the residents of River City Lab, you will be immersed in the community of start-ups currently located at River City Labs. You will have the opportunity to meet the visiting mentors, attend events build contacts and connect with Brisbane's emerging entrepreneur community. A fantastic opportunity if you are considering creating a start-up in the future.

What The QUT Innovation Space Does?

- Connects local start-ups with skilled university students.
- Advertises projects for the Start-Up Internship
- Submits relevant documentation for insurance purposes.

What QUT Doesn't Do?

- We do not select successful applicants for the internship projects. We leave that up to the start-up.
- We, do not mediate any projects, we have limited resources and cannot manage the progress of the project.

It is your responsibility to be clear about your commitment, skills, timeframe and desired outcomes in relation to the project and select a project and company that suits your skills and interests. We are not able to mediate or manage the project or the company.

Who Is Eligible?

All students are eligible to apply, however please check the required skills specified in each project.

When Will The Internship Begin?

The starting time is different for each project. Please see the individual project outlines for specific dates.

How Do I Get Involved Or Get More Info?

Please see the outlined projects on the QUT Innovation Space Website - www.qutinnovationspace.com for a description of each project. If none of the projects are applicable to you but you are still interested, please email: qis@qut.edu.au and we can put out a request for projects relevant to your skills and interests.

Project Registration Form

1. Start-Up Profile (What are you developing)

URL:

What 3 adjectives describe the culture within your start-up?

3. What is the project the intern(s) will be working on? What do they need to deliver at the end of the project?

4. What skills are required to complete the project?

5.Work Load?

E.g. Full time, 2 days a week, 20 hours a week, depends on the student, etc.

6. What is the time frame of your project?

Ideal start date:

Ideal completion date:

8. What kind of music does your team listen to while they work?

9. Do you agree to supervise, provide guidance, advice and tuition to the student where required.

QIS Start-Up Internship - Agreement

1. **Time frame of project:** Desired Start date: _____ Desired End date: _____

2. **Work Load:** estimated hrs/wk_____.

3. **The Start-Up (Deliverables)**
   - **a** What do you expect to be delivered at the end of this project?
   - **b** Do you agree to provide to the student: support, guidance and tuition where needed?
   - **c** Approximate Hours in total to complete the project (must not exceed 228 hours)?

4. **The Student (motivations & expectations)**
   - **a** You are not being financially compensated for this project. What are your motivations for undertaking the internship?
   - **b** What skills are you hoping to develop?
   - **c** What experience are you hoping to gain?
   - **d** What contacts are you hoping to make?
   - **e** Do you want to create your own Start-Up in the future?

5. **Potential Problems**
   - **a** What potential problems can you see emerging within this project? What should happen if they arise?
     - **i** Problem 1:
       Action if problem arises:
     - **ii** Problem 2:
       Action if problem arises:

PRINT NAME (Student) _____
SIGNATURE _____
DATE _____

PRINT NAME (Start-Up) _____
SIGNATURE _____
DATE _____

Appendix E – Pitching Practice Workshop Series

The following workshop series aims to develop: idea pitching skills, presentation skills, and public speaking confidence. The workshops are designed to be a series of fun, fast and practical sessions.

Each of the five workshops outlined below, explores a different element of constructing a persuasive and confident presentation. Students will explore and practice: introductions, value propositions, pitch structures and practical public speaking skills.

E1. Workshop Series Summary

	Focus	Aim	Activities	Materials
1	**Introductions**	Practice introductions and set the tone for participants to receive feedback.	- Check-in. - Short Introductions. - Think Fast Pitching practice.	- Rory's Story Cubes. -Think Fast Pitching Slides (only 1-4). - Timer. - Post-it notes.
2	**Short, Sharp and Succinct**	Demonstrate that too much information drowns the message. Practice and critique public speaking skills.	- Check-in. - To the point: Less is More. - Practice. - Feedback & Wrap-up	- Rory's Story Cubes. - Post-it notes. - Paper & pens. - Timer.
3	**The Value Proposition** – What do you want and what value are you offering your audience.	Introduce Value Propositions. Practice developing a product and audience specific Value Proposition.	- Check-in. - Importance of a Value Proposition. - Developing your Value Proposition. - Feedback & Wrap-up.	- Rory's Story Cubes. - Value Proposition examples sheet. - Value Proposition Exercise Sheet (1 for each participant). - Timer.
4	**Practice Makes Perfect**	Practice concepts presented in previous 3 workshops and focus on critiquing presentation styles. I.e. body language, stance, hand gestures, eye contact, etc.	- Check-in. - Think Fast Pitching Slides (all). - Group Feedback. - Feedback & Wrap-up.	- Rory's Story Cubes. - Think Fast Pitching Slides (all). - Timer. - Peer Evaluation Form.
5	**Structures and Stories**	Introduce additional structures for telling stories and presenting an idea. Critique and improve presentation skills.	- Check-in. - Different Structures. - Answering Questions. - Feedback & Wrap-up.	- Rory's Story Cubes. - Timer. - Post-it Notes.

E2. Tools for Workshops

Rory's Story Cubes

The workshops make use of a simple toy, Rory's Story Cubes (<www.storycubes.com>), to serve as icebreakers. The roll of dice introduces fun at what can be a tense moment, levels the playing field to some degree, implies an element of chance in beginning the exercise, and, importantly, stimulates the creative senses. There are three versions of Rory's Story Cubes (Original, Voyages and Actions) that can be employed to provide variation in the activity storylines. Picture cards can serve the same purpose.

Pictures © Rory's Story Cubes

Think Fast Pitching Slides

The Think Fast Pitching slides are a set of 14 points, each printed on an A4 page in 72-point font and distributed to student groups. In the first basic pitching exercises presented here, only the first four slides are used. The 14 slides are as follows:

1. Hi, I'm ….

   From ….
2. The problem we are solving is ….
3. Our solution is ….
4. This is a good opportunity because ….
5. Our target market is ….
6. We will acquire customers by ….
7. We will make money by ….
8. Our key competition is ….
9. We're better because ….
10. Our team is ….
11. What we will do next ….
12. Currently we are seeking ….
13. To summarise ….
14. Thanks!!!!

Feedback Sheets

Positive feedback from members of the group is the best form of encouragement and engagement, and the most likely means of achieving positive outcomes. A small pile of feedback sheets placed in the middle of the table allows the groups to provide comment for each student pitching.

A couple of examples of standard Feedback Sheets are provided on this page. The scaling method below proved popular with students as they could easily give a rank without making too many comments.

Pitching Feedback Sheet

Name of Pitcher:

Areas that you could provide feedback can include:

- Eye contact
- Posture
- Pitch and volume
- Hands
- Confidence
- Conciseness
- Time
- Ums and Ahs
- Speed

Presenter:						
CRITERIA	**RATING (5 HIGHEST)**					**SUGGESTIONS**
Eye Contact	1	2	3	4	5	
Posture	1	2	3	4	5	
Pitch & Volume	1	2	3	4	5	
Hands (Usage)	1	2	3	4	5	
Confidence	1	2	3	4	5	
Conciseness	1	2	3	4	5	
Time	1	2	3	4	5	
Um/Ah Count	1	2	3	4	5	
Content	1	2	3	4	5	
Speed	1	2	3	4	5	
Other	1	2	3	4	5	
TOTAL						

For the Value Propositions activities (Workshop 3), the following format was used for feedback sheets.

PRESENTER:	Relationship:	
	Objective:	
	Value Proposition:	
	Convinced?	

Each format can be copied multiple times on a single page, subsequently cut into single feedback sheets and used in sessions.

Student Handouts

Perhaps the best one page handout for students was found at the Speakers Lab of Butler University (<http://www.butler.edu/speakers-lab/>) where a number of useful resources can be found for building presentations.

ELEMENTS OF A SPEECH

The Speakers Lab
Butler University

Knowing and understanding the different parts of a speech is the first step towards creating an effective speech. The following are the major elements of a speech.

- The Introduction:
  - The attention getter is used to get your audience involved and interested in your subject. You can use a personal story, alarming statistic, or a joke as your attention getter.
  - Your audience will not listen to you unless you establish relevance. You must let the audience know why your topic is important to them and why they should listen to what you have to say.
  - It is sometimes necessary to establish credibility. In doing so, you are letting your audience know that you are knowledgeable of and able to speak about the topic. This is also known as establishing goodwill.
  - The preview lets your audience know exactly what the main points of your speech will be. Your preview is like a map of the concepts you will be talking about later.
- The Body:
  - Your main points should be clear and concise. You do not want your audience wondering about what you are talking.
  - Transitions can help keep your speech clear. Between every main point, you should use a transition. A transition should contain a summary statement of the concept you have just talked about. Then you should show how the topic you just spoke of is related to the next topic.
- The Conclusion:
  - A review reminds your audience what you have just talked about. In the review, you get a chance to repeat the important parts of your speech that the audience should keep in mind.
  - The clincher includes any final thoughts you want to leave with your audience. The clincher also signals to the audience that you are done speaking.

<www.butler.edu/media/2553789/elements_of_a_speech.pdf>

E3. Workshop 1: Introductions

Aim

- Introduce students to the basic elements of an introduction.
- Practice speaking and expressing ideas to a group.
- Familiarise students with receiving constructive feedback.
- Introduce a basic pitching structure (Think Fast Pitching).

Group Size

4 - 8 per group (if there are more than 8 students, divide into groups of 4-7 participants)

Workshop Summary

Activity	**Materials**	**Time**
1. Check-in	- Rory's Story Cubes	10 mins
2. Short Introductions (be strict on time)	- Timer - Rory's Story Cubes or a list of products for students to choose from.	30 mins
3. Think Fast Pitching Practice	- Rory's Story Cubes - Timer - Think Fast Pitching Slides (slides 1-4) x 3 copies	30 mins
4. Feedback or Wrap-up	Feedback sheets	10 mins
	Total workshop time	**1:20 hr**

Workshop 1 – Activity 1: Check In

Time: 10 mins
Materials: Rory's Story Cubes
Process:

1. To start the exercise, first demonstrate how check-in works.
    a. Roll the dice.
    b. Choose one or two pictures that relate to what is currently on your mind.
    c. In 30 seconds or less explain why these dice are relevant to your day, what's currently on your mind or why you chose them.
2. Pass the dice randomly to someone else in the group. Do not pass the dice clockwise or anti-clockwise around the circle. The activity works better when the order is random.
3. Repeat the exercise until everyone has spoken.

This activity gives every participant an opportunity to 'arrive', check-in and empty their mind of whatever thoughts are occupying their attention. It is important to the

dynamics of the group that every participant has the opportunity to speak.

Workshop 1 – Activity 2: Short Introductions

Time: 30 mins
Materials: Rory's Story Cubes, Timer (phone)
Process:
The activity is divided into three quick rounds as follows:
Round 1 (in pairs, presenting to an individual)

1. Put the dice in the middle of the group and ask every participant to take one die.
2. Ask the students to role their die. Ask them to invent a product or service from the picture on the die. Only give them 30 seconds to 1 minute to come up with a product. The emphasis of the activity is not on the product.
3. Tell students they are the inventor of this new product and they just met the person beside them on the bus. In 30 seconds or less, they are going to introduce themselves to the person beside them and explain what their product is. (Assign pairs if needed.)
4. Give students 30 seconds to introduce themselves, and their product, to the person sitting next to them. After approximately 30 seconds or when everyone has finished, ask pairs to swap roles and the other student now introduces their product/service.
5. After 30 seconds – 1 minute, stop the activity and elicit from the group the essential elements of an introduction. Write answers on the board.
6. [e.g., - **attention getter/icebreaker, relevance, credibility and preview**. *See: Elements of a Speech, from Butler University (Page 20)* for more info on what to include in a good introduction.]
7. Repeat the exercise with new partners now they have had a chance to reflect on what to include in a good introduction.

Round 2 (presenting to a group)

If there are 8 or more participants split the group into smaller groups of a minimum of 3 and maximum of 7.

1. Students can keep their original product from round 1 or choose a new product by rolling their die again.
2. Ask students one at a time to introduce their product to the group in 30 seconds or less. Don't give feedback yet. Just let students feel comfortable standing in front of the group presenting their ideas.

Before students start inform them that:

1. They only have 30 seconds. The alarm will sound at 30 seconds and they must stop.
2. Participants must stand in front of the group and present to the group. Not sitting in a chair or standing behind their chair. This is presentation practice.
3. Do not let participants lean on the table, chair or wall.
4. Do not allow any negative self talk or apologies before they begin; e.g., "my product is a little lame, but I will try anyway", "I'm not very good at public speaking", "I couldn't think of a good product", etc.

Round 3 (practice and feedback)

1. Hand out a packet of post-it notes to each participant. Ask them to write down any practical piece of advice that the presenter could improve on. Be clear that the advice must be an action in the positive form. For example:
    - "Use hand gestures to emphasise your important points."
    - "Slow down a little, it was sometimes hard to understand everything you said."
    - "Remember to make eye contact with the crowd. It felt like you were trying to get away from us."
    - "A solid but comfortable stance would make me have more confidence in what you where saying."
    - "Relax your shoulders."
    - The audience could comment on: stance, ums & ahs, hand gestures, eye contact.
2. At the end of the round, not at the end of each presentation, ask the group to volunteer any recommendations for improvement, either general or specific. Note: If the group is particularly self-conscious you could collect the Post-It notes and put them on the wall for people to stand up and read. Or you could select a few useful notes to read out.

Workshop 1 – Activity 3: Think Fast Pitching Practice

Time: 30 mins
Materials: Rory's Story Cubes, Timer (phone), Think Fast Pitching Slides (only slides 1 – 4) one copy per group
Process:
The activity is divided into three quick rounds as follows:
Round 1

1. Student can keep their original product or roll the dice/die and create a new product/service.
2. Demonstrate with a volunteer first.
    a. Place the Think Fast Pitching Slides (1-4) face down on the table.
    b. Ask the volunteer to complete the sentence on each slide about their product/service as it is turned over.
    c. Turn the slide over one at a time, allow approx. 10 seconds for each slide.
3. Allocate someone to turn over the slides in each group.
4. When everyone has had a turn, ask for feedback from the group about what they thought about the exercise. Was it difficult? Was it easier or harder with the slides as prompts? Did they find the prompts distracting or it was good to have a guide to follow?

Round 2
Repeat Round 1

Round 3

1. Collect the slides from each group.

2. Elicit from the group what four questions the slides answered.
3. Repeat the activity again without the slides as prompts.

If time permits:

4. Repeat again, and ask participants to write down on their post-it notes, constructive feedback for the presenter. See Activity 2, round 3 for examples of constructive suggestions.

Workshop 1 – Activity 4: Feedback And Wrap Up

Time: 10 mins
Materials: Feedback sheets
Process:

1. Ask the group if there were any presenting techniques they learnt or observed from others in the workshop that they thought were effective and would like to incorporate into their presentations. For example:
    - "I liked the speed that so and so spoke. I am going to try and slow down when I present."
    - "I know I often stand with my legs crossed. I would like to work on having a stronger stance."
    - "I like the way so and so used a story to personalise the product and make it relevant to the audience...."
2. Ask what part of the workshop they found the most useful and what wasn't useful.
3. Ask for any suggestions as to how the exercises could be improved?
4. Ask if there is anything that they would specifically like to work on?

E4. Workshop 2: Short, Sharp and Succinct!

Aim

- Demonstrate that too much information can drown the message
- Practice and critique public speaking skills

Group Sizes

4 - 8 per group (if there are more than 8 students, divide the groups of 4-7 participants)

Workshop Summary

Activity	**Materials**	**Time**
1. Check-in	- Rory's Story Cubes	10 mins
2. To the Point: Less is More	- Pen - Paper - Timer	30 mins
3. Get to the Point	- Timer - Post-It Notes (packets)	30 mins
4. Feedback or wrap-up	- Feedback sheets	10 mins
	Total workshop time	**1:20 hr**

Workshop 2 – Activity 1: Check In

Time: 10 mins
Materials: Rory's Story Cubes
Process:

See Workshop 1 – Activity 1 for activity details.

Workshop 2 – Activity 2: To The Point: Less Is More

Time: 30 mins
Materials: Pen, Paper, Rory's Story Cubes, Timer (phone)
Process:
Each group rolls the dice to invent a product or service, or use their own if they are working on something.

1. Tell each group to write a 32-word (or as close as possible) introduction about their product or service. Give them three minutes to finish.
2. Demonstration – Chinese Whispers
   a. Ask three volunteer to stand in a line at the front of the class - advise they are going to play a game of Chinese Whispers.

   b. Ask for a fourth volunteer. Someone who is willing to volunteer the introduction they just wrote. Do not read their introduction out to the class. Inform the three volunteers that they do not have to communicate the exact words they hear, but the general essence of the product.
   c. In a Chinese Whisper style chain ask the fourth volunteer to whisper their introduction to the start of the chain.
   d. When the message reaches the fourth person, ask them to tell the class what the product is.
   e. Ask for the original 32-word introduction to be read out loud to the group as a comparison.
   f. Highlight how easily the message is lost. The 'story' you tell about your product must be easily repeated and repeated and repeated, without losing its essential elements.
3. Ask everyone to sit down. And tell them to group to cross out 16 words from the introduction they just wrote, such that the message about the product remains intact. The groups can read out their 16-word introduction.
4. Once they have finished, tell the group to cross out another 8 words, and again the message about the product must remain intact.
5. Once they have finished this, and reflected upon the message, tell the group to cross out 4 more words.
6. Ask the original person that volunteered their product to read their 4 – 8 words. The remaining 4 – 8 words that are left are the key points of their pitch. Elicit several other 4-word summaries from the group.
7. Highlight how much meaning can be communicated from just a few words.

Workshop 2 – Activity 3: Get To The Point

Time: 30 mins
Materials: Timer, Post-It Notes
Process:
The activity is divided into two rounds.
<u>Round 1</u>

1. Participants can use their product/service from Activity 2 or roll the dice and create a new product.
2. Give each participant a packet of Post-It Notes.
3. Give students three minutes to prepare a 30 second introduction based around their 8 words from the previous exercise. Ask them to note down the 4 – 6 most important words (the essence of their product/service), but do not show anyone else.
4. Put students into pairs and identify them as A and B. Ask A to present the 30 second introduction.
5. Have B write down the 4 - 6 most important elements they understand from A's introduction.
6. Compare the 4 – 6 'most important' words A wrote down before their presentation and those that B wrote down.
7. A and B swap roles and repeat the exercise.

Round 2

1. Tell students they have three minutes to tweak their 30-second introductions before they present to the group.
2. Students then present their product/service one by one to the group.
3. Ask the group to write down any constructive feedback on presentation style if they would like to.
4. At the end of the round give both specific and general feedback and elicit any feedback from the group.

Activity 4 - Feedback Or Wrap-Up

Time: 10 mins
Materials: Feedback sheets
Process:

See Workshop 1 – Activity 4 for activity details.

E5. Workshop 3: Your Purpose - What do you want? Why should I care?

Aim

- Introduce Value Propositions and why they are important.
- Practice embedding a Value Proposition into a presentation.

Group Sizes

4 - 8 per group (if there are more than 8 students, divide the groups of 4-7 participants)

Workshop Summary

Activity	**Materials**	**Time**
1. Check-in	- Rory's Story Cubes	10 mins
2. Value Proposition	- Timer	20 mins
3. Communicating your Value Proposition	- Rory's Story Cubes - Value Propositions Exercise Sheet (see below) - Timer - Think Fast Pitching Slides 1 – 4 (for reference only)	30 mins
4. Feedback or wrap-up	- Feedback sheets	10 mins
	Total workshop time	**1:10 hr**

Workshop 3 – Activity 1: Check In

Time: 10 mins
Materials: Rory's Story Cubes
Process:

See Workshop 1 – Activity 1 for activity details.

Workshop 3 – Activity 2: Value Proposition

Time: 20 mins
Materials: Timer
Process:
This activity is divided into two rounds and uses the value propositions listed below.

1. Put participants in pairs of A and B:
   a. A is the employee.
   b. B is the boss.
2. Tell student A – their objective is to get a raise.
3. Build on the board.

a. Relationship: Employee to Boss.
b. Objective: Get a promotion.

4. Give the students one minute to role-play the relationship in which time the employee must convince their boss to give them a promotion.
5. Stop the exercise after 1 minute and get feedback from the group. Did they get a promotion? What reasons did they use, or try to use, to convince their boss to give them a promotion? Add the 'reasons' to the board under Value Proposition:
   a. Relationship: Employee to Boss.
   b. Objective: Get a promotion.
   c. Value Proposition: A company must develop leaders... etc.
6. Explain that to reach your objective you must also be clear what value you are presenting to your audience.
7. Change partners and repeat the exercise. This time however, the 'Boss' has the following objective. Write on the board.
   a. Relationship: Boss to employee.
   b. Objective: To keep the employee without giving them a raise.
8. After 1 or 2 minutes, ask for feedback from the group in regards to:
   a. Different value propositions used by the Boss.
   b. Did they agree to give the employee a promotion or not? Why/Why not? Did they come to a compromise?

Workshop 3 – Activity 3 – Developing Your Value Proposition

Time: 30 mins
Materials: Rory's Story Cubes, Value Proposition Exercise Sheet, Timer, Think Fast Pitching Slides 1 – 4 (for reference only if desired)
Process:

1. Ask students to roll the dice and invent a product/service or use a product, service or business idea of their own.
2. Ask students to complete the following on a piece of paper (do not tell the group)
3. Relationship: (for this exercise this may be a customer, investor, partner, manufacturer, asking a family member for a loan, etc.)
4. Objective:
5. Value Proposition:
6. Give students 3 minutes to prepare a 1 minute pitch about their product. They should be clear about their Objective and Value proposition. They can use the Think Fast Pitching Structure if they like, but they must incorporate their value proposition. (See week 1 for structure).
7. Give each person a copy of the table below. Print double sided and cut in half. Tell them they are going to note down the Objective and Value Proposition for six of the presentations. They can choose any six.
8. Presenters need to tell the audience the relationship before they begin their one minute presentation.

9. After everyone has presented, gather feedback from the group about what objectives and value propositions they wrote down for each of the presentations. Compare these with the Objectives and Value Propositions of the presenters.

If there is time:

1. Give the group 3 minutes to think about what they would change in their presentation based on the feedback from the last round.
2. Each person, or just a few volunteers, can present again.

Workshop 3 – Activity 4 - Feedback Or Wrap-Up

Time: 10 mins
Materials: Feedback Sheets
Process:

See Workshop 1 – Activity 4 for activity details.

Examples of Value Propositions

Relationship: Employee to Boss
Objective: To get a promotion
Value Proposition: A company must develop leaders to survive

Relationship: Dissatisfied customer to seller
Objective: Get money back or exchange
Value Proposition: I know good companies like yours stand behind their merchandise

Relationship: Employee to Boss
Objective: To get a raise
Value Proposition: I've proved the value of my work to the company

Relationship: Boss to Employee
Objective: To keep the employee without giving them a raise
Value Proposition: Everything in its time

Relationship: Customer to Bank
Objective: Not to pay incorrect charge
Value Proposition: I'll be glad to pay when the charges are proven correct

Relationship: Salesman to Customer
Objective: To sell diamond earrings to customer for wife's anniversary
Value Proposition: What better way to show your love for her?

Relationship: One business woman to another
Objective: To get her to talk to a franchise dealer
Value Proposition: Financial independence for women is wonderful, new and exciting

Relationship: Customer to Salesperson
Objective: To get the best buy
Value Proposition: I like the product but I'm on a tight budget

Relationship: Non-Smoker to Smoker
Objective: To get them to stop smoking
Value Proposition: Smoking not only kills you & everyone you smoke around, but kills your wallet.

E6. Workshop 4: Practice Makes Perfect

Aim

- To practice the concepts and skills learnt in the previous workshops.
- To critique and improve public speaking skills such as eye contact, hand gestures, stance, voice projections etc.

Group Sizes

4 - 8 per group (if there are more than 8 students, divide the groups of 4-7 participants)

Workshop Summary

Activity		**Materials**	**Time**
1. Check-in		- Rory's Story Cubes	10 mins
2. Think Fast Pitching		- Rory's Story Cubes - Fast Think Pitching Slides (All) - Timers (one each) - A3 paper	30 mins
3. 3 Min Pitch	- Timer	30 mins	
4. Feedback and Wrap-up		10 mins	
	Total workshop time	**80 - 90 min**	

Workshop 4 – Activity 1: Check In

Time: 10 mins
Materials: Rory's Story Cubes
Process:

See workshop 1 – activity 1 for activity details.

Workshop 4 – Activity 2: Think Fast Pitching

Time: 10 mins
Materials: Rory's Story Cubes, Timer, Fast Think Pitching slides (All)
Process:
The activity is divided into two rounds.
Round 1

1. Each student creates a product using Rory's Story Cubes.
2. Put students into groups of 3 or 4.

3. Elicit from the students, the four elements that were in the Pitching Slides from workshop 1. Write answers on the board.
    a. I am....., from.....
    b. The problem I am solving is.....
    c. Our solution is .....
    d. This is a good opportunity because.....
4. Ask students to each present their product/service to their group using the pitching slides. Everyone should be familiar with this activity, but demonstrate in front of the class with a volunteer if necessary.
5. Allow each student to present at least once.
6. With a volunteer from the group demonstrate again, but shuffle the slides first. Highlight that the order can be changed around to suit your personal style.
7. Ask each group to shuffle their set of slides and complete another round of presenting.
8. When all students have presented at least once, gather feedback from the groups.

<u>Round 2:</u>

1. Give each group the missing slides from the Fast Think Pitching set. Shuffle them first. They should now have the entire set.
2. Ask the groups to put the slides in the most logical order. Give them 3 minutes (There isn't a 'right' answer).
3. Elicit the 'correct' order from the groups. It is fine if there are differences between the groups. It's all part of personal style.
4. Each person presents their product/service again to their group, but this time using all the slides.

Workshop 4 – Activity 3 – 3 Minute Pitch

Time: 10 mins
Materials: Timer, Post-It notes (packets)
Process:

1. Ask the group if they remember the Value Proposition exercise from last week?
2. Elicit the three categories that were covered in the exercise and write them on the board.
    a. Relationship:
    b. Objective:
    c. Value Proposition:
3. Ask the group if they remember the 'Less is More' exercise? Ask how many words we reduced the introduction down to (i.e., 4- 6).
4. On the board build the Presentation Plan diagram shown below.
5. Provide A3 paper, Post-It notes and a pen to students.
6. Give participants 3 – 5 minutes to create their own presentations plan. They should complete the following categories:
    a. Product/service
    b. Value proposition
        i. Relationship
        ii. Objective

iii. Value Proposition

c. Product essence – 4 to 6 key words that summarise the essence of the product/service. What you want the audience to remember and tell other people.
d. Chose 9 slides from the Think Fast Pitching series. Write one slide on each post-it note. Students can add more slides or invent new slides if they like.

7. After a few minutes, stop the group and begin presentations.
    a. Be strict with time or presentations. No more than three minutes each.
    b. Take notes and give feedback on the presentation at the end of the round.
8. If time permits, repeat exercise.

Workshop 4 – Activity 4 - Feedback Or Wrap-Up

Time: 10 mins
Materials: Feedback Sheets
Process:

See workshop 1 – activity 4 for activity details.

E7. Workshop 5: Structures and Stories

Aim

- Explore some common story structures and how they might be used in a presentation.
- Practice answering questions.

Group Sizes

4 - 8 per group (if there are more than 8 students, divide the groups of 4-7 participants)

Workshop Summary

Activity	**Materials**	**Time**
1. Check-in	- Rory's Story Cubes	10 mins
2. Different Structures	- Timer - Cinderella curve - 'Why, How, What' Diagram - Think Fast Pitching slides - Story	30 mins
3. Answering Questions	- Timer	30 mins
4. Feedback or Wrap-up	- Feedback sheets	10 mins
	Total workshop time	**70-80 min**

Workshop 5 – Activity 1: Check In

Time: 10 mins
Materials: Rory's Story Cubes
Process:

See workshop 1 – activity 1 for activity details.

Workshop 5 – Activity 2: Different Pitch Structures

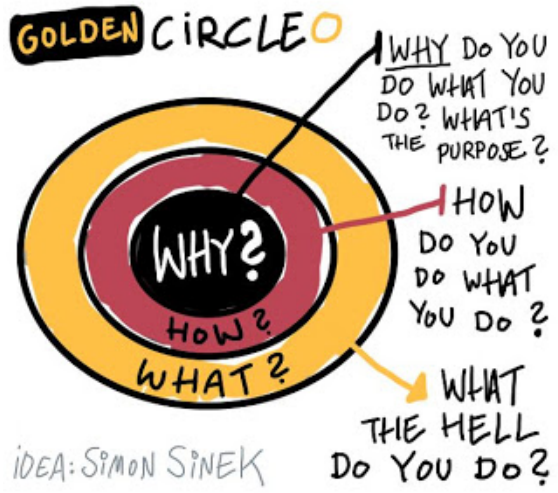
Time: 30 mins
Materials: Rory's Story Cubes, Pitch structure diagrams, Think Fast Pitching Slides, Timer
Process:

1. Elicit from the group the 4 main points that were covered in the first 4 Think Fast Pitching Slides and write on board:
   a. 'Hi, I'm....., From.....'
   b. 'The problem we are solving is....'
   c. 'Our solutions is.....'

d. ‘This is a great opportunity because..... ‘

2. Highlight that there are many strategies and structures for delivering a pitch. It all depends on personal style and what your objective of the pitch or presentation is.
3. Elicit from the group any other structures they can think of.
4. Go over the basis of the Cinderella Curve and the Golden Circle (Why, How, What).
5. Ask students to chose one and incorporate their chosen structure into a 3 minute pitch. (Use Rory’s Story Cubes for students to create products.)
6. Encourage students to use the different structures as inspiration, they do not have to use only one, e.g., ‘The Cinderella Curve’ may not be appropriate for an entire presentation, but it might be a good introduction to make your product/service or problem relevant and personal to the audience.
7. Give students five minutes to prepare.
8. All students present to the group.
9. Ask for feedback from the group and give feedback at the end of the round.

Figure X – The Golden Circle of Pitching (or anything really, the meaning of life even?). It depends on where you start (see below).



Example 1: Traditional Computer Company
What: We sell computers
How: Low cost through the web
Why: To make money

Example 2: Apple
Why: To put a dent in the universe
How: Design innovative interfaces
What: We sell computers

Which company is the more profitable and viable?

Workshop 5 – Activity 3: Answering Questions

Time: 30 mins
Materials: Rory’s Story Cubes, Pitch structure diagrams, Think Fast Pitching Slides, Timer
Process: Repeat Activity 1 with the following additions.

1. Put students into groups of three.
2. Ask the groups to brainstorm questions they would ask the presentations from the last round.
3. Elicit questions from the groups and write on the board.

4. Give students three minutes to think about anything they would improve in their last round and how they would answer the questions on the board if they were asked.
5. Each student presents again for three minutes, there is then two minutes for questions.

Workshop 5 – Activity 4 - Feedback Or Wrap-Up

Time: 10 mins
Materials: Feedback Sheets
Process:

See workshop 1 – activity 4 for activity details.

Appendix F – The Stories of Mitchell and Michael

Mitchell Cox and Michael Larkins were asked for their stories about their interaction with the QIS and their business plans. The following vignettes are the transcripts they wrote, unedited (except for an occasional typographical error), in response to questions. The testimonials of Mitchell and Michael are reproduced in Chapter 9.

F1: Mitchell Cox

Personal Details

Name: Mitchell Cox

Studies: Bachelor of Biomedical Science, graduated 2012 (3rd yr student when first engaged the QIS mentor program)

Age: 21

Background

Why did you come to QIS?

After attending the QUT Social Change Conference I was inspired to get out and make a difference in my area of expertise. Because of my background in Science I had an idea for in-school, fun, curriculum relevant science workshops that inspired young people to consider science as a career and as a way to chance their world.

But, I have no experience in business of business development. As a science student I am no exposed to any business knowledge or concepts.

QIS was a place for me to come and get help, support and direction. It has been a fantastic pace to air ideas and engage with people that are passionate about ideas, entrepreneurship, and action.

What QIS workshops, resources or events did you utilise?

1. Pitching workshops
2. Student Start-up night – competed in pitching competition
3. The Mentor Program:
    a. Feedback sessions with a QIS mentor.
    b. Mentor sessions with industry members including:
        i. Phone interview with high school science teacher.
        ii. Coffee with local entrepreneur –Niall McCarthy
        iii. Business modelling and brainstorming with QIS mentor group.

iv. Introduction to University contacts for feedback & business development advice – This meeting resulted in product sales.

What did you learn from engaging in the mentor program?

Skill, knowledge?

By taking part in the mentor program I came away with a greater understanding of:

- The product development lifecycle.
- How to approach business and product development.
- Where to source current relevant business information. (this was very important for me. There is so much business information available on the web, that withouth guidance it is difficult to know what is good information and what is not.)
- Early business set-up information, such as:
    - How to register for an ABN.
    - How to register for a business name.
    - The benefits and requirements for different business structures.
    - Confidence in networking – every time you come to QIS there is someone new, so you learn to meet random people really effectively.

Encouragement, personal support, idea validation?

It was great to have somewhere to air my ideas and people I could bounce those ideas around with. I learnt a lot about idea development just by talking to different people and getting a glimpse of how they work.

Meeting other people at QIS that were interested in entrepreneurship and who are making ideas happen inspired me to think big, and realise that I can do something with an idea. None of my friends are interested in this; I have no entrepreneurs in my day-to-day life.

Meeting people from different backgrounds also taught be a lot. This is something that I don't get exposure to in a science degree. It's fun to meet people who approach ideas and problem solving in ways other than how science doesn't. A design student sees and approaches things different to how a science student does.

The Idea/Business

What was your idea when you first came to QIS (briefly)?

My first idea was to deliver cool and fun biology workshops in high schools. There wasn't really a product yet. I just had an interest in inspiring young people that science is cool and that it can change the world.

What has it become? How has it changed?

- From sole trader to partnership.
- Shifted from onsite to online.
- Learnt more about what the consumer wants and we have changed to match that.
- Currently in the prototype stage but still generating revenue.

Now, **Vertic Education** is an online education support platform for High schools. The platform delivers up-to-date and curriculum relevant content in the form of videos and workshops that support both teachers and students.

The platform fills the gap between individual teacher knowledge/expertise and curriculum requirements. It specifically supports teachers in remote areas that often find themselves teacher content outside of their speciality and training.

F2: Michael Larkins

Personal Details

Name: Michael Larkins

Studies: Bachelor of Applied Science (Hons) in Physics, 2009 graduate; PhD Candidate (Physics)

Age: 28

Background

Why did you come to QIS?

A friend introduced me to QIS to get feedback on technology licensing, however prior to this I had seen a lecture from Prof. Collet regarding his visit to American and European universities and their approach to fostering entrepreneurial students. I was quite interested in his findings and wanted to see what he was trying to implement here.

What did you attend at QIS (mentoring, workshops)

I received mentoring from two industry figures arranged by the QIS Project Manager, Jessie Roberts, and was also introduced to an advertising /visualization company regarding one of my projects. I additionally participated in the Pitching Practice sessions and the associated Rotary competition.

What did you learn from engaging in the mentor program?

The industry advice I received from the two leaders Jessie introduced was invaluable. The uncertainty in how to proceed with an idea can be agonising, and trial and error is sometimes not an option. In both cases what appeared to be the most intuitive or logical course of action was incorrect, as pointed out by the industry leaders.

In addition, I learnt that exposure to entrepreneurial personalities is invaluable in itself. The mindset of people who have built companies from scratch or implement technologies is radically different to most people in industry let alone a university. Few people have experience with actually implementing innovative ideas and contact with these people is invaluable.

Pitching practice was helpful for presentation of ideas. I found that real pitches have occurred in 1 on 1 or small groups however the practice in communicating ideas, problems and strategies is quite useful.

Jessie and Declan were very supportive of all my ideas. I took up a lot of their time discussing problems and opportunities. Helping other people with their ideas also strengthened my ability to spot possible paths forward and potential problems.

The Idea/Business

What was your idea when you first came to QIS (briefly)?

The idea we had when we first approached QIS was an improved welding system for a mining company who had a particular problem we could solve. It was a high capital, high-risk project and we were unsure as to the best way to proceed with regard to licensing, investment etc.

On the basis of advice from the mentor Jessie introduced, we were able to pursue a sensible licensing/development strategy. With the economic downturn, the mining company cut its “blue sky” R&D projects but has very recently expressed interest in pursuing the project once again.

Additionally I have worked with QIS on a non-profit project regarding organic waste recycling, as well advice on a commercialisation project related to my PhD work.

Appendix G – A Bigger QUT Business Hatchery

While the QIS became an ideas incubator and training framework, there remained a need to develop a 'light touch' mini-business incubator, which could offer residency and real support, to progress nascent businesses.

One lesson from the QIS experience is that the QUT student population does realise a number of new ventures with potential. Not all can or will be successful; however, the innovation landscape in 2010/2011 did not necessarily encourage their success, as discussed elsewhere. Lessons learned from the QIS underpin the proposed approach below.

While studying the chosen international exemplars during the ALTC Teaching Fellowship it was clear that most, if not all, of the practitioners of EE programs were business people or business-oriented technology-based academics focused on new venture creation. Some had also published 'how-to' books around their EE program (see Appendix H).

The practitioners were not academic theoreticians undertaking research on EE and/or new venture creation and commercialisation. A university-based EE program, such as the QIS, coupled with a 'light-touch' incubator dedicated to experimental approaches to new venture creation provides a unique environment to research new models of the creativity, innovation and entrepreneurship.

Given that the new models of 'light-touch' incubators, such as RCL, iLab and CEA, are currently (2013) struggling to find suitable business to incubate, then it could be argued that the focus of research and training should be at the early stages of the creativity and innovation to address the failure of the creative potential to translate to MVPs.

The following describes a model advanced to the university and external agencies in June 2011, six months into the QIS project, and undertaken in the QIS, albeit at a lower level. The current environment at RCL closely mirrors the model described below – the difference lies in an active research program that captures and analyses the antecedents of entrepreneurial success as well as the underlying education pedagogies that contribute and enhance that success.

QUT Business Hatchery

A LIVING LAB FOR RESEARCH AND TRAINING IN ENTREPRENEURSHIP

Program Aims:

This initiative aims to build the QUT Business Hatchery (or just plain Hatchery) as an innovation community that would contribute to Brisbane's capacity in the newly emerging industries. The Hatchery is a unique 360-degree approach to workforce development that engages new enterprises as learners and also as teachers.

The Hatchery will be a training environment providing a culture of innovation for emerging industries arising from the melting pot of converging disciplines of information and communication technologies, creative industries, games design, digital service, personalised medicine and health, sustainability and clean technologies.

The primary targets are start-up ventures emerging from QUT's student population, including the QUT Innovation Space (QIS), commercial initiatives arising through QUT's research programs and new ventures entering the Brisbane scene.

Key Objectives:

- Train emerging entrepreneurs with the vocational skills essential for business success using a flexible, immersion-style learning by doing approach,
- Build an entrepreneurial, innovative, highly skilled, business-ready workforce,
- Create a dynamic and synergistic innovation community environment of like-minded individuals and start-ups that leverages self-learning of new generation approaches to sustainable systemic innovation, unique business models and new pipelines of commercialisation, and **ultimately**
- Improve the success rate of start-up companies in the emerging Queensland business landscape.

Importantly, the Hatchery, in conjunction with the QIS, will serve as a living research laboratory into the pipeline of creativity, innovation and entrepreneurship adding to the knowledge that underpins and unites the disciplines. To meet the new challenges in a landscape that competes globally and frugally, new business models appropriate for a volatile world need to be explored. Such a research environment will also contribute significantly to the emerging pedagogy of entrepreneurship education.

Project Need

Skills education in tertiary institutes fails to (*and cannot*) address the experiential training and knowledge required for start-ups to bridge the 'valley of death' between the 'garage-at-home' and the self-sufficient start-up environment. Given that small-to-medium businesses account for 90% of the workforce in Australia, new (sector-leading) approaches to providing the requisite skills base and improving the success rate of start-up businesses are essential.

The formation, growth and success of start-ups are mostly driven by a 'learning-by-doing' approach and this can represent an adaptive capacity of both the individual start-up and the QUT Business Hatchery. While the training of tertiary education institutes, Technical and Further Education (TAFE) and university, provides the necessary skills for founding and running established businesses, each start-up has context specific barriers to self-sufficiency. Furthermore, the business landscape in the emerging industries is evolving at a rapid rate requiring application of new models of business and pipelines of innovation. These new models are not necessarily transparent to the training providers as many are actually invented, trialled and tested by start-ups themselves. Dissemination to other start-ups is often via horizontal learning mechanisms and knowledge transfer as peers and co-workers support and mentor each other, rather than through traditional training

relationships. One role of the Innovation Facilitator in the Hatchery is to capture the innovation that emerges in business approaches and practices for future vocational training purposes.

Most start-ups are too embryonic to enter business incubators. In any event, the latter usually provide structured, traditional and managed approaches for transition from defined product to market entry and are focused on income generation for their own survival. A high level of chaordic flexibility, nurturing and training is required for start-up businesses to grow to become self-sustaining SMEs. In the isolated and un-supported garage-at-home environment, start-ups must maintain energy and momentum, search for guidance, training and mentoring, refine their product and business model, and secure a funding base to reach the status of self-sufficiency.

The Hatchery provides the opportunity to experiment and fail, and try again.

Adopting an innovation community approach to embryonic start-ups will enhance the pipeline of new SMEs entering the regional business landscape.

One lesson from the QIS experience is that the QUT student population realises a large number of start-ups. Not all can or will be successful; however, the current innovation landscape does not necessarily encourage their success. Traditional business incubators are too prescriptive and rigid; delivering programs tried and tested in old and established industries. As an experimental pre-incubator, drawing on the intrinsic energy and innovative approaches of the participants, the Hatchery can improve that success rate. One avenue for launching and nurturing new commercial initiatives from QUT research programs can also be within the Hatchery. Many of these new commercial entities have the same requirements as those of the start-ups born outside of the research laboratory.

Proposed Training Approaches

The teaching landscape would be a tailored approach in a benign or 'light-touch' pre-incubator (i.e., a hatchery) where education, interaction (networking) and mutual support sponsor a positive personal journey leading to company success. Training packages would be fitted to the needs of the individual new ventures and their composite members, and would be negotiated for the context-specific requirements for the individual and overall workforce development. Each member of each new venture would be given a value voucher for consumption within the framework of an 'engagement contract'. The modules would provide a menu of offerings (experiences, short courses, internships, mentoring hours, seminars, master classes) that addressed *requisite* vocational skills across a broad range of topics (business, technical, the creative, literacy, professionalism). The approaches to building a connected innovation community are already being developed within the QIS.

The Hatchery aims to bring together university, TAFE and private providers as well as capitalise on the evolving horizontal experiential learning framework of an innovation community.

Training modules would address aspects of company success around:

- Creativity and systemic innovation
- Market research,
- Intellectual property,
- Product development and delivery,
- Commercialisation,
- Sales and marketing,
- Organic business models, modelling and planning,
- Company structuring, management, HR and finance,
- Funding incentives and venture finance,
- Social, ethical and environmental responsibility,

At first glance the training framework would appear to be not unlike a commercial business incubator. There would be, however, a fundamental difference: training would not be the domain of recognised training providers such those from university or TAFE. Rather training would capitalise on the horizontal experiential learning framework of an innovation community.

A Living Research Laboratory

The Hatchery also presents a unique opportunity on a number of fronts. There is the scope to experiment with new models that transition innovation to enterprise. New models can be captured and disseminated to other start-ups. There is also the opportunity to compare and contrast failure with success. Importantly, there is the opportunity to research, in *real-time*, the antecedents of entrepreneurial success, the pedagogy of entrepreneurship education and their interaction. This contrasts research approaches currently employed, where EE and entrepreneurship research are distinct and, by their very nature, retrospective.

Key Research Objectives:

- Explore new pipelines of innovation and invention to enterprise,
- Research approaches that underpin sustainable, systemic innovation in business structures that are flatter in structure, more collaborative and increasingly service-oriented.
- Capture the frameworks of building successful non-traditional business models in a volatile world, and contrast with models that fail.
- Investigate skills requirements for the innovation to commercialisation pipeline and the underlying drivers and skills of those engaged in the process.
- Explore models of skills delivery and knowledge transfer in a 180-degree learning environment where learners become teachers.

The fusion of research into the two sides of the drivers of entrepreneurial activity would make the QIS/Hatchery model unique in Australia, and possibly the world.

Appendix H – Great Books For Emerging Entrepreneurs

Allen KA. 2010. Entrepreneurship for scientists and engineers. New Jersey: Pearson Education.

Baron RA & Shane SA. 2008. Entrepreneurship: A process perspective, 2ed. Ohio: South-Western Cengage Learning.

Belsky S. 2012. Making ideas happen: Overcoming obstacles between vision and reality. New York: Portfolio Trade.

Blank SG. 2007. Four steps to the epiphany: Successful strategies for products that win. Cafepress.com.

Blank S & Dorf B. 2012. The startup owner's manual: The step-by-step guide for building a great company. California: K&S Ranch.

Docie RL, Sr. 2010. The inventor's bible: How to market and licence your brilliant ideas. California: Ten Speed Press.

Foreman LJ & Welytok JG. 2009. The independent inventor's handbook. New York: Workman Publishing.

Meyer MH & Crane FG. 2011. Entrepreneurship: An innovator's guide to startups and corporate ventures. California: Sage Publications.

Osterwalder A & Pigneur Y. 2010. Business model generation: A handbook for visionaries, game changers, and challengers. New Jersey: Wiley and Sons Publishers.

Reis E. 2011. The Lean Startup. New York: Cown Business.

Reiss B. 2009. Bootstrapping 101. Florida: R&R.

Stathis M. 2004. The startup company bible for entrepreneurs. Virginia: Apex VA Publishing.